APPENDIX 3

EPA Final Permit and Response to Comments for SWRP NPDES Permit # NM0022250.
March 31, 2005

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

March 31, 2005

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7003 0500 003 0871 0862)

REPLY TO: 6WQ-CA

Mr. Douglas Dailey, P.E.
Division Manager
City of Albuquerque
4201 Second Street SW
Albuquerque, NM 87105

Re: Application to Discharge to Waters of the United States
Permit No. NM0022250 - City of Albuquerque Southside Water Reclamation Plant

Dear Mr. Dailey:

This package constitutes EPA's final permit decision for the above referenced facility. Enclosed are the responses to comments received during the public comment period and the final permit. According to EPA regulations (see §124.19), within 30 days after a final permit decision has been issued, any person who filed comments on that draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision.

Should you have any questions regarding the final permit, please feel free to contact Maria Okpala of the NPDES Permits Branch at the above address or VOICE: (214) 665-3152, FAX: (214) 665-2191, or EMAIL: okpala.maria@epa.gov. Should you have any questions regarding compliance with the conditions of this permit, please contact Taylor Sharpe of the Water Enforcement Branch at the above address or VOICE: (214) 665-7112.

Sincerely yours,

Miguel I. Flores
Director
Water Quality Protection Division

Enclosures

cc w/enclosures:
New Mexico Environment Department
Pueblo of Isleta

NPDES Permit for the City of Albuquerque Publicly Owned Treatment Works

The City of Albuquerque POTW has a design capacity of 76 MGD (117.8 cfs) with an annual average flow of 52.7 MGD (81.7 cfs). A draft permit was public noticed on June 26, 2004. The draft permit was based on the New Mexico Environment Department (NMED) annual critical low flow of 68 cfs and the Isleta critical low flow of 0 cfs. The current NMED and Isleta Standards as well as the proposed Isleta Standards were used to develop permit limits. Both the draft and final permits have limitations for mercury and Total Inorganic Nitrogen as proposed in the revised Isleta Water Quality Standards (WQS). On July 23, 2004, the State of New Mexico certified that the discharge will comply with the applicable provisions of the Clean Water Act and with appropriate requirements of State law.

Region 6 received comments from the State of New Mexico, Pueblo of Isleta, and the City of Albuquerque. Major comments received from the City of Albuquerque were to replace the annual critical low flow with seasonal critical low flows based on irrigation season flow patterns and authority to implement a Pollution Prevention Program for mercury in lieu of a hard permit limit. The New Mexico WQS do provide for the calculation of seasonally based critical low flow values, "after due consideration of site-specific conditions." EPA has determined that site-specific conditions present in the City of Albuquerque permit do warrant issuance of a tiered limits approach. Specific circumstances are the highly modified nature of the Rio Grande above the effluent discharge point including the segregation of irrigation return flows to the irrigation canals creating an irrigation season deficit for flows to the river and the upstream impoundment of the Rio Grande at the Cochiti Reservoir and the management of releases from this impoundment. Seasonal flow limits have been established in the final permit for Carbonaceous Biochemical Oxygen Demand (5 day), Dissolved Oxygen, Ammonia, Total Inorganic Nitrogen and Nitrate. The Region could not allow full calculated non-irrigation limits for the other pollutants due to Water Quality Management Plan restrictions. The final permit contains hard mercury limits. The Region believes that mercury levels can be met through enhanced Pretreatment program activities targeted at known mercury sources.

The Region also made additional changes to the draft permit. These changes include the definition of 4 day average flow, inclusion of the 7 day average loading limits, inclusion of arsenic interim limits based on current permit, and a change to the signatory permit requirement consistent with the latest version of the code of federal regulation.

The final permit will have an effective date of May 1, 2005. The final permit is a public record that can be obtained upon request. A statement of reasons for changes made to the draft permit and responses to comments received will be sent to persons who commented on the draft permit. According to EPA regulations (see §124.19), within 30 days after a final permit decision has been issued any person who filed comments on that draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision.

Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

NPDES Permit No. NM0022250

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87110

is authorized to discharge from a facility located at 4201 Second Street SW in the City of Albuquerque, County of Bernalillo, State of New Mexico,

to receiving waters named the Rio Grande in Segment 20.6.4.105 of the Rio Grande Basin, from

Outfall 001: Latitude 35° 01' 04" N, Longitude 106° 40' 13" W

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, and IV hereof.

This permit supersedes and replaces NPDES Permit No. NM0022250 issued June 1, 1994.

This permit shall become effective on May 1, 2005

This permit and the authorization to discharge shall expire at midnight, April 30, 2010

Issued on March 31, 2005

Miguel I. Flores
Division Director
Water Quality Protection Division

Prepared by

Maria Okpala
Environmental Engineer
Permits Section (6WQ-PP)

SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS.

1. **INTERIM Effluent Limits - New Mexico WQS - Mercury - 76 MGD Design Flow**

During the period beginning on the effective date of the permit and lasting until 36-months from the effective date of the permit, the permittee is authorized to discharge treated municipal waste water to the Rio Grande in segment number 20.6.4.105 of the Rio Grande Basin. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC		DISCHARGE LIMITATIONS (lbs/day, unless stated)		(mg/l, unless stated)			MONITORING REQUIREMENTS	
	Storet Code	30-Day Average	7-Day Average	30-Day Average	7-Day Average	Daily Maximum	Measurement Frequency	Sample Type
YEAR ROUND LIMITATIONS								
Effluent Flow, Discharge	50050	Report MGD	Report MGD	***	***	N/A	Continuous	Totalizing Meter
Flow, Rio Grande, Qs4D (*1)	00056	Report MGD	Report MGD	***	***	N/A	Daily (*1)	Record (*1)
Total Suspended Solids	00530	19015	28522	30	45	N/A	Once/Day	24-Hour Composite
Boron, Total (*2)	01022	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Boron, Dissolved (*2)	01020	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Molybdenum, Total (*2)	01062	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Molybdenum, Dissolved (*2)	01060	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Arsenic, Total (*2)	01002	8.7	9.6 (*7)	13.7 ug/l	N/A	15.2 ug/l	Once/Week	24-Hour Composite
Mercury, Total (*2)	71900	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Fecal Coliform Bacteria (Colonies / 100 ml)	74055	N/A	N/A	100	N/A	200	Once/Day	24-Hour Composite
Total Residual Chlorine, TRC	50060	N/A	N/A	N/A	N/A	0.011 (*3)	Once/Day	Instantaneous Grab (*4)
pH, Minimum/Maximum Values, Standard Units	00400	N/A	N/A	6.6 min.	9.0 max.	N/A	Once/Day	Grab
JULY 1 - OCTOBER 31 LIMITATIONS								
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082							
Qs4D < 34.6 MGD (*a)		5071	7,606	8	12	N/A	Once/Day	24-Hour Composite
Qs4D ≥ 34.6 MGD (*d)		9508	14261	15	22.5	N/A	Once/Day	24-Hour Composite
Dissolved Oxygen (minimum)	00300	N/A	N/A	4	N/A	N/A	Once/Day	24-Hour Composite
Ammonia Nitrogen, Total (as N)	00610	634	951 (*7)	1	N/A	1.5	Once/Day	24-Hour Composite

EFFLUENT CHARACTERISTIC	Storet Code	DISCHARGE LIMITATIONS (lbs/day, unless stated) 30-Day Average	7-Day Average	(mg/l, unless noted) 30-Day Average	7-Day Average	(or as noted) Daily Maximum	MONITORING REQUIREMENTS Measurement Frequency	Sample Type
JULY 1 - OCTOBER 31 LIMITATIONS (cont)								
Nitrate Nitrogen, Total (as N)	00620							
Qs4D < 34.6 MGD (*a)		5071	5071 (*7)	8	N/A	8	Once/Week	24-Hour Composite
Qs4D ≥ 34.6 MGD (*d)		7606	7606 (*7)	12	N/A	12	Once/Week	24-Hour Composite
Total Inorganic Nitrogen (*8)	00640	Report	Report	Report	N/A	Report	Once/Week	24-Hour Composite
Whole Effluent Lethality (*5)	22414			min. (*6)	min.			
7-Day NOEC								
Qs4D <34.6 MGD (*a)								
Ceriodaphnia dubia		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
Qs4D ≥ 34.6 MGD (*d)								
Ceriodaphnia dubia		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
NOVEMBER 1 - JUNE 30 LIMITATIONS								
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082							
Qs4D < 34.6 MGD (*a)		6338	7606	8	12	N/A	Once/Day	24-Hour Composite
34.6 MGD ≤ Qs4D < 183 MGD (*b)		9508	14261	15	22.5	N/A	Once/Day	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		15846	25354	25	40	N/A	Once/Day	24-Hour Composite
Dissolved Oxygen (minimum)		00300						
Qs4D < 183 MGD (*e)		N/A	N/A	4	N/A	N/A	Once/Day	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		N/A	N/A	2	N/A	N/A	Once/Day	24-Hour Composite
Ammonia Nitrogen, Total (as N)	00610							
Qs4D < 183 MGD (*e)		634	951 (*7)	1	N/A	1.5	Once/Day	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		1901	2852 (*7)	3	N/A	4.5	Once/Day	24-Hour Composite
Nitrate Nitrogen, Total (as N)	00620							
Qs4D < 36.6 MGD (*a)		5071	N/A	8	N/A	8	Once/Week	24-Hour Composite
34.6 MGD ≤ Qs4D < 183 MGD (*b)		7606	N/A	12	N/A	12	Once/Week	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		15846	N/A	25	N/A	N/A	Once/Week	24-Hour Composite
Total Inorganic Nitrogen (*8)	00640	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite

EFFLUENT CHARACTERISTIC	Storet Code	DISCHARGE LIMITATIONS (lbs/day, unless stated) 30-Day Average	7-Day Average	(mg/l, unless noted) 30-Day Average	7-Day Average	(or as noted) Daily Maximum	MONITORING REQUIREMENTS Measurement Frequency	Sample Type
NOVEMBER 1 - JUNE 30 LIMITATIONS (cont)								
Whole Effluent Lethality (*5) 7-Day NOEC Qs4D <34.6 MGD (*a)	22414			min. (*6)	min.			
Ceriodaphnia dubia		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
34.6 MGD ≤ Qs4D < 183 MGD (*b)								
Ceriodaphnia dubia		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
Qs4D ≥ 183 MGD (*c)								
Ceriodaphnia dubia		—	—	29% (*6)	29%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	29% (*6)	29%	N/A	1/Quarter	24-Hour Composite

FOOTNOTES

(*1) Qs4D shall be defined as the "four-day average low flow", from the Rio Grande river, taken upstream of the facility. (See Part I.C.8, "Monitoring and Reporting", of the permit for specific conditions and definitions.) The Qs4D will be calculated as each day's daily minimum low flow arithmetically averaged with the three preceding days minimum low-flow rates. For DMR reporting requirements, the facility shall report the monthly average Qs4D and the minimum monthly Qs4D. The monthly Qs4D shall be defined as the arithmetic average of all calculated Qs4D's for the calendar month. The monthly Qs4D will be used to determine the appropriate flow rate for those pollutant limits that are based on either stream flow and/or stream flow and time (season). The minimum monthly Qs4D is the lowest Qs4D that occurs during the calendar month.

(*2) If any individual analytical test result for Arsenic, Boron, Mercury, Molybdenum, and Nitrate is less than the minimum quantification level (MQL) listed below, then a value of zero (0) may be used for that test result for the discharge monitoring report (DMR) calculations and reporting requirements.

Pollutant	MQL, ug/l
Arsenic	10
Boron	100
Mercury	0.2
Molybdenum	30
Nitrate	100

(*3) NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40 CFR 136. If during the term of this permit the minimum quantification limit for TRC becomes less than 0.011 mg/l, then 0.011 mg/l shall become the effluent limitation. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.

(*4) For the purposes of TRC reporting, "instantaneous grab" is defined in 40 CFR Part 136 as being measured within fifteen (15) minutes after sampling.

FOOTNOTES (cont)

(*5) Compliance with the Whole Effluent Toxicity limitations is required on the effective date of this permit. See PART II, Section B, Whole Effluent Toxicity Limits for additional WET monitoring and reporting conditions.
The NOEC is defined as the greatest effluent concentration which does not elicit lethality that is statistically different from the control (0% effluent) at the 95% confidence level. The 30-day average minimum and the 7-day minimum lethality values shall not be less than the limits listed in the Tables.

(*6) If more than one valid test for a species was performed during the reporting period, the test NOEC's will be averaged arithmetically and reported as the 30-day average minimum NOEC for that reporting period.

(*7) These are daily maximum loading limits, and are based on the daily maximum concentrations.

(*8) Total Inorganic Nitrogen (TIN) shall be calculated as the sum of: Ammonia (NH3) + Ammonium (NH4) + Nitrate (NO3) + Nitrite (NO2)

(*a) Qs4D < 34.6 MGD: Qs4D is less than 34.6 MGD (53.7 cfs).

(*b) 34.6 MGD ≤ Qs4D < 183 MGD: Qs4D is greater than or equal to 34.6 MGD (53.7 cfs), and less than 183 MGD (283 cfs).

(*c) Qs4D ≥ 183 MGD: Qs4D is greater than or equal to 183 MGD (283 cfs)

(*d) Qs4D ≥ 34.6 MGD: Qs4D is greater than or equal to 34.6 MGD.

(*e) Qs4D < 183 MGD: Qs4D is less than 183 MGD.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. **INTERIM Effluent Limits - Pueblo of Isleta WQS - Arsenic and Total Inorganic Nitrogen - 76 MGD Design Flow**

During the period beginning on the effective date of the approval of the 2002 Pueblo of Isleta WQS, and lasting for no longer than three years, the permittee is authorized to discharge treated municipal waste water to the Rio Grande in segment number 20.6.4.105 of the Rio Grande Basin. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC		DISCHARGE LIMITATIONS (lbs/day, unless stated)		DISCHARGE LIMITATIONS (mg/l, unless stated)			MONITORING REQUIREMENTS	
	Storet Code	30-Day Average	7-Day Average	30-Day Average	7-Day Average	Daily Maximum	Measurement Frequency	Sample Type
YEAR ROUND LIMITATIONS								
Effluent Flow, Discharge	50050	Report MGD	Report MGD	***	***	N/A	Continuous	Totalizing Meter
Flow, Rio Grande, Qs4D (*1)	00056	Report MGD	Report MGD	***	***	N/A	Daily (*1)	Record (*1)
Total Suspended Solids	00530	19015	28522	30	45	N/A	Once/Day	24-Hour Composite
Boron, Total (*2)	01022	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Boron, Dissolved (*2)	01020	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Molybdenum, Total (*2)	01062	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Molybdenum, Dissolved (*2)	01060	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Arsenic, Total (*2)	01002	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Mercury, Total (*2)	71900	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Fecal Coliform Bacteria (Colonies / 100 ml)	74055	N/A	N/A	100	N/A	200	Once/Day	24-Hour Composite
Total Residual Chlorine, TRC	50060	N/A	N/A	N/A	N/A	0.011 (*3)	Once/Day	Instantaneous Grab (*4)
pH, Minimum/Maximum Values, Standard Units	00400	N/A	N/A	6.6 min.	9.0 max.	N/A	Once/Day	Grab
JULY 1 - OCTOBER 31 LIMITATIONS								
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082							
Qs4D < 34.6 MGD (*a)		5071	7,606	8	12	N/A	Once/Day	24-Hour Composite
Qs4D ≥ 34.6 MGD (*d)		9508	14261	15	22.5	N/A	Once/Day	24-Hour Composite
Dissolved Oxygen (minimum)	00300	N/A	N/A	4	N/A	N/A	Once/Day	24-Hour Composite
Ammonia Nitrogen, Total (as N)	00610	634	951 (*7)	1	N/A	1.5	Once/Day	24-Hour Composite

EFFLUENT CHARACTERISTIC	Storet Code	DISCHARGE LIMITATIONS (lbs/day, unless stated) 30-Day Average	7-Day Average	(mg/l, unless noted) 30-Day Average	7-Day Average	(or as noted) Daily Maximum	MONITORING REQUIREMENTS Measurement Frequency	Sample Type
JULY 1 - OCTOBER 31 LIMITATIONS								
Nitrate Nitrogen, Total (as N)	00620							
Qs4D < 34.6 MGD (*a)		5071	5071 (*7)	8	N/A	8	Once/Week	24-Hour Composite
Qs4D ≥ 34.6 MGD (*d)		7606	7606 (*7)	12	N/A	12	Once/Week	24-Hour Composite
Total Inorganic Nitrogen (*8)	00640	Report	Report	Report	N/A	Report	Once/Week	24-Hour Composite
Whole Effluent Lethality (*5)	22414			min. (*6)	min.			
7-Day NOEC								
Qs4D <53.7 MGD (*a)								
Ceriodaphnia dubia		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
Qs4D ≥ 53.7 MGD (*d)								
Ceriodaphnia dubia		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
NOVEMBER 1 - JUNE 30 LIMITATIONS								
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082							
Qs4D < 34.6 MGD (*a)		6338	7606	8	12	N/A	Once/Day	24-Hour Composite
34.6 MGD ≤ Qs4D < 183 MGD (*b)		9508	14261	15	22.5	N/A	Once/Day	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		15846	25354	25	40	N/A	Once/Day	24-Hour Composite
Dissolved Oxygen (minimum)	00300							
Qs4D < 183 MGD (*e)		N/A	N/A	4	N/A	N/A	Once/Day	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		N/A	N/A	2	N/A	N/A	Once/Day	24-Hour Composite
Ammonia Nitrogen, Total (as N)	00610							
Qs4D < 183 MGD (*e)		634	951 (*7)	1	N/A	1.5	Once/Day	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		1901	2852 (*7)	3	N/A	4.5	Once/Day	24-Hour Composite
Nitrate Nitrogen, Total (as N)	00620							
Qs4D < 34.6 MGD (*a)		5071	N/A	8	N/A	8	Once/Week	24-Hour Composite
34.6 MGD ≤ Qs4D < 183 MGD (*b)		7606	N/A	12	N/A	12	Once/Week	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		15846	N/A	25	N/A	N/A	Once/Week	24-Hour Composite
Total Inorganic Nitrogen (*8)	00640	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite

EFFLUENT CHARACTERISTIC	Storet Code	DISCHARGE LIMITATIONS (lbs/day, unless stated) 30-Day Average	7-Day Average	(mg/l, unless noted) 30-Day Average	7-Day Average	(or as noted) Daily Maximum	MONITORING REQUIREMENTS Measurement Frequency	Sample Type
NOVEMBER 1 - JUNE 30 LIMITATIONS (cont)								
Whole Effluent Lethality (*5) 7-Day NOEC	22414			min. (*6)	min.			
Qs4D <34.6 MGD (*a)								
Ceriodaphnia dubia		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
34.6 MGD ≤ Qs4D < 183 MGD (*b)								
Ceriodaphnia dubia		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
Qs4D ≥ 183 MGD (*c)								
Ceriodaphnia dubia		—	—	29% (*6)	29%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	29% (*6)	29%	N/A	1/Quarter	24-Hour Composite

FOOTNOTES

(*1) Qs4D shall be defined as the "four-day average low flow", from the Rio Grande river, taken upstream of the facility. (See Part I.C.8, "Monitoring and Reporting", of the permit for specific conditions and definitions.) The Qs4D will be calculated as each day's daily minimum low flow arithmetically averaged with the three preceding days minimum low-flow rates. For DMR reporting requirements, the facility shall report the monthly average Qs4D and the minimum monthly Qs4D. The monthly Qs4D shall be defined as the arithmetic average of all calculated Qs4D's for the calendar month. The monthly Qs4D will be used to determine the appropriate flow rate for those pollutant limits that are based on either stream flow and/or stream flow and time (season). The minimum monthly Qs4D is the lowest Qs4D that occurs during the calendar month.

(*2) If any individual analytical test result for Arsenic, Boron, Mercury, Molybdenum, and Nitrate is less than the minimum quantification level (MQL) listed below, then a value of zero (0) may be used for that test result for the discharge monitoring report (DMR) calculations and reporting requirements.

Pollutant	MQL, ug/l
Arsenic	10
Boron	100
Mercury	0.2
Molybdenum	30
Nitrate	100

(*3) NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40 CFR 136. If during the term of this permit the minimum quantification limit for TRC becomes less than 0.011 mg/l, then 0.011 mg/l shall become the effluent limitation. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.

(*4) For the purposes of TRC reporting, "instantaneous grab" is defined in 40 CFR Part 136 as being measured within fifteen (15) minutes after sampling.

(*5) Compliance with the Whole Effluent Toxicity limitations is required on the effective date of this permit. See PART II, Section B, Whole Effluent Toxicity Limits for additional WET monitoring and reporting conditions.
The NOEC is defined as the greatest effluent concentration which does not elicit lethality that is statistically different from the control (0% effluent) at the 95% confidence level. The 30-day average minimum and the 7-day minimum lethality values shall not be less than the limits listed in the Tables.

(*6) If more than one valid test for a species was performed during the reporting period, the test NOEC's will be averaged arithmetically and reported as the 30-day average minimum NOEC for that reporting period.

(*7) These are daily maximum loading limits, and are based on the daily maximum concentrations.

(*8) Total Inorganic Nitrogen (TIN) shall be calculated as the sum of: Ammonia (NH3) + Ammonium (NH4) + Nitrate (NO3) + Nitrite (NO2)

(*a) Qs4D < 34.6 MGD: Qs4D is less than 34.6 MGD (53.7 cfs).

(*b) 34.6 MGD ≤ Qs4D < 183 MGD: Qs4D is greater than or equal to 34.6 MGD (53.7 cfs), and less than 183 MGD (283 cfs).

(*c) Qs4D ≥ 183 MGD: Qs4D is greater than or equal to 183 MGD (283 cfs).

(*d) Qs4D ≥ 34.6 MGD: Qs4D is greater than or equal to 34.6 MGD.

(*e) Qs4D < 183 MGD: Qs4D is less than 183 MGD.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. FINAL Effluent Limits - 76 MGD Design Flow

During the period starting three years after the Pueblo of Isleta WQS have been approved, and lasting until the permit expiration date, the permittee is authorized to discharge treated municipal waste water to the Rio Grande in segment number 20.6.4.105 of the Rio Grande Basin. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC		DISCHARGE LIMITATIONS (lbs/day, unless stated)		(mg/l, unless stated)		(unless noted)	MONITORING REQUIREMENTS	
	Storet Code	30-Day Average	7-Day Average	30-Day Average	7-Day Average	Daily Maximum	Measurement Frequency	Sample Type
YEAR ROUND LIMITATIONS								
Effluent Flow, Discharge	50050	Report MGD	Report MGD	***	***		Continuous	Totalizing Meter
Flow, Rio Grande, Qs4D (*1)	00056	Report MGD	Report MGD	***	***		Daily (*1)	Record (*1)
Total Suspended Solids	00530	19,015	28,552	30	45	N/A	Once/Day	24-Hour Composite
Boron, Total (*2)	01022	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Boron, Dissolved (*2)	01020	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Molybdenum, Total (*2)	01062	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Molybdenum, Dissolved (*2)	01060	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Arsenic, Total (*2)	01002	Report	Report (*7)	Report	N/A	Report	Once/Week	24-Hour Composite
Mercury, Total (*2)	71900							
Qs4D <53.7 MGD (*a)		0.0051	0.008	0.008 ug/l	N/A	0.012 ug/l	Once/Week	24-Hour Composite
Qs4D ≥ 53.7 MGD (*d)		0.007	0.011	0.012 ug/l	N/A	0.017 ug/l	Once/Week	24-Hour Composite
Fecal Coliform Bacteria (Colonies / 100 ml)	74055	N/A	N/A	100	N/A	200	Once/Day	24-Hour Composite
Total Residual Chlorine, TRC	50060	N/A	N/A	N/A	N/A	0.011 (*3)	Once/Day	Instantaneous Grab (*4)
pH, Minimum/Maximum Values, Standard Units	00400	N/A	N/A	6.6 min.	9.0 max.	N/A	Once/Day	Grab
JULY 1 - OCTOBER 31 LIMITATIONS								
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082							
Qs4D < 34.6 MGD (*a)		5071	7606	8	12	N/A	Once/Day	24-Hour Composite
Qs4D ≥ 34.6 MGD (*d)		9508	14261	15	22.5	N/A	Once/Day	24-Hour Composite

EFFLUENT CHARACTERISTIC	Storet Code	DISCHARGE LIMITATIONS (lbs/day, unless stated) 30-Day Average	7-Day Average	(mg/l, unless stated) 30-Day Average	7-Day Average	(unless noted) Daily Maximum	MONITORING REQUIREMENTS Measurement Frequency	Sample Type
JULY 1 - OCTOBER 31 LIMITATIONS (cont)								
Dissolved Oxygen (minimum)	00300	N/A	N/A	4	N/A	N/A	Once/Day	24-Hour Composite
Ammonia Nitrogen, Total (as N)	00610	634	951	1 (*7)	N/A	1.5	Once/Day	24-Hour Composite
Total Inorganic Nitrogen (*8)	00640							
Qs4D < 34.6 MGD (*a)		4228	N/A	6.67 (*7)	N/A	10	Once/Week	24-Hour Composite
Qs4D ≥ 34.6 MGD (*d)		6155	N/A	9.71 (*7)	N/A	14.56	Once/Week	24-Hour Composite
Whole Effluent Lethality (*5) 7-Day NOEC	22414			min. (*6)	min.			
Qs4D <53.7 MGD (*a)								
Ceriodaphnia dubia		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
Qs4D ≥ 34.6 MGD (*d)								
Ceriodaphnia dubia		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
NOVEMBER 1 - JUNE 30 LIMITATIONS								
Carbonaceous Biochemical Oxygen Demand (5-Day)	80082							
Qs4D < 34.6 MGD (*a)		6338	7606	8	12	N/A	Once/Day	24-Hour Composite
34.6 MGD ≤ Qs4D < 183 MGD (*b)		9508	14261	15	22.5	N/A	Once/Day	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		15846	25354	25	40	N/A	Once/Day	24-Hour Composite
Dissolved Oxygen (minimum)	00300							
Qs4D < 183 MGD (*e)		N/A	N/A	4	N/A	N/A	Once/Day	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		N/A	N/A	2	N/A	N/A	Once/Day	24-Hour Composite
Ammonia Nitrogen, Total (as N)	00610							
Qs4D < 183 MGD (*e)		792	1204	1.25 (*7)	N/A	1.9	Once/Day	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		1901	2852	3 (*7)	N/A	4.5	Once/Day	24-Hour Composite
Total Inorganic Nitrogen (*8)	00640							
Qs4D < 34.6 MGD		4228	N/A	6.67 (*7)	N/A	10	Once/Week	24-Hour Composite
34.6 MGD ≤ Qs4D < 183 MGD		6155	N/A	9.71 (*7)	N/A	14.56	Once/Week	24-Hour Composite
Qs4D ≥ 183 MGD (*c)		14375	N/A	22.68 (*7)	N/A	34	Once/Week	24-Hour Composite

CHARACTERISTIC	Storet Code	DISCHARGE LIMITATIONS (lbs/day, unless stated) 30-Day Average	7-Day Average	(mg/l, unless stated) 30-Day Average	7-Day Average	(unless noted) Daily Maximum	MONITORING REQUIREMENTS Measurement Frequency	Sample Type
NOVEMBER 1 - JUNE 30 LIMITATIONS (cont)								
Whole Effluent Lethality (*5) 7-Day NOEC	22414			min. (*6)	min.			
Qs4D <34.6 MGD (*a)								
Ceriodaphnia dubia		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	100% (*6)	100%	N/A	1/Quarter	24-Hour Composite
34.6 MGD ≤ Qs4D < 183 MGD (*b)								
Ceriodaphnia dubia		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	69% (*6)	69%	N/A	1/Quarter	24-Hour Composite
Qs4D ≥ 183 MGD (*c)								
Ceriodaphnia dubia		—	—	29% (*6)	29%	N/A	1/Quarter	24-Hour Composite
Pimephales promelas		—	—	29% (*6)	29%	N/A	1/Quarter	24-Hour Composite

FOOTNOTES

(*1) Qs4D shall be defined as the "four-day average low flow", from the Rio Grande river, taken upstream of the facility. (See Part I.C.8, "Monitoring and Reporting", of the permit for specific conditions and definitions.) The Qs4D will be calculated as each day's daily minimum low flow arithmetically averaged with the three preceding days minimum low-flow rates. For DMR reporting requirements, the facility shall report the monthly average Qs4D and the minimum monthly Qs4D. The monthly Qs4D shall be defined as the arithmetic average of all calculated Qs4D's for the calendar month. The monthly Qs4D will be used to determine the appropriate flow rate for those pollutant limits that are based on either stream flow and/or stream flow and time (season). The minimum monthly Qs4D is the lowest Qs4D that occurs during the calendar month.

(*2) If any individual analytical test result for Arsenic, Boron, Mercury, Molybdenum, and Nitrate is less than the minimum quantification level (MQL) listed below, then a value of zero (0) may be used for that test result for the discharge monitoring report (DMR) calculations and reporting requirements.

Pollutant	MQL, ug/l
Arsenic	10
Boron	100
Mercury	0.2
Molybdenum	30
Nitrate	100

(*3) NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40 CFR 136. If during the term of this permit the minimum quantification limit for TRC becomes less than 0.011 mg/l, then 0.011 mg/l shall become the effluent limitation. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.

FOOTNOTES (cont)

(*4) For the purposes of TRC reporting, "instantaneous grab" is defined in 40 CFR Part 136 as being measured within fifteen (15) minutes after sampling.

(*5) Compliance with the Whole Effluent Toxicity limitations is required on the effective date of this permit. See PART II, Section B, Whole Effluent Toxicity Limits for additional WET monitoring and reporting conditions.
The NOEC is defined as the greatest effluent concentration which does not elicit lethality that is statistically different from the control (0% effluent) at the 95% confidence level. The 30-day average minimum and the 7-day minimum lethality values shall not be less than the limits listed in the Tables.

(*6) If more than one valid test for a species was performed during the reporting period, the test NOEC's will be averaged arithmetically and reported as the 30-day average minimum NOEC for that reporting period.

(*7) These are daily maximum loading limits, and are based on the daily maximum concentrations.

(*8) Total Inorganic Nitrogen (TIN) shall be calculated as the sum of: Ammonia (NH3) + Ammonium (NH4) + Nitrate (NO3) + Nitrite (NO2)

(*a) Qs4D < 34.6 MGD: Qs4D is less than 34.6 MGD (53.7 cfs).

(*b) 34.6 MGD ≤ Qs4D < 183 MGD: Qs4D is greater than or equal to 34.6 MGD (53.7 cfs), and less than 183 MGD (283 cfs).

(*c) Qs4D ≥ 183 MGD: Qs4D is greater than or equal to 183 MGD (283 cfs).

(*d) Qs4D ≥ 34.6 MGD: Qs4D is greater than or equal to 34.6 MGD (53.7 cfs).

(*e) Qs4D < 183 MGD: Qs4D is less than 183 MGD (53.7 cfs).

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

There shall be no discharge of floating solids or visible foam in other than trace amounts.

The effluent shall contain no visible film of oil or globules of grease on the surface or coat the banks or bottoms of the watercourse.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge from the final treatment unit from the following approximate location:

Outfall 001: Latitude 35° 01' 04" North, Longitude 106° 40' 13" West.

Samples taken in compliance with the monitoring requirements specified above for Outfall 001 shall be taken at the discharge point from the final treatment unit prior to discharging into the receiving waterbody.

SECTION B. COMPLIANCE SCHEDULES.

Compliance Schedule 1: The permittee shall, through continued pro-active pollution prevention activities, analysis of Mercury in water and fish tissue from the outfall channel, risk analysis studies or other activities, achieve compliance with the final effluent limitations specified for **Total Mercury** within three years from the effective date of this permit;

	ACTIVITY	DATE OF COMPLETION
08/01/05 •	Design clean method sampling program for water and fish tissue at outfall channel	3- months from permit effective date
11/01/05 •	Implement clean methods sampling program	6- months from permit effective date
05/01/06 •	Determine public health risk potential and if necessary exceedence cause(s);	12-months from permit effective date
01/01/07 •	Develop Control options;	20-months from permit effective date
05/01/07 •	Evaluate and Select control mechanisms	24-months from permit effective date
11/01/07 •	Implement corrective action; and	30-months from permit effective date
05/01/08 •	Attain final Effluent Limitations	36-months from permit effective date

No later than 14-days after the completion of activities needed to comply with this schedule, the permittee shall submit a report in writing, both to EPA, the Pueblo of Isletta and the State Agency, stating that the activities have been completed.

a. The permittee shall achieve compliance with all **Total Mercury** final effluent limitations no later than 36-months after permit effective date.

b. The permittee shall submit a progress report outlining the status of the activities during the months of January, April, July, and October until compliance is achieved.

c. No later than 14 calendar days following the date for compliance for **Total Mercury**, the permittee shall submit a written notice of compliance or noncompliance.

d. Where the project completion reported is less than would be required to assure completion of construction by the required date, the report of progress shall also include an explanation for this delay and proposed remedial actions.

Compliance Schedule 2: The permittee shall achieve compliance with the final effluent limitations specified for Pueblo of Isletta WQS (IPWQS) for **Total Inorganic Nitrogen** within three years from the effective date of the Pueblo of Isletta WQS approval;

ACTIVITY	DATE OF COMPLETION
Complete Engineering, Design Plans & Specifications	12-months from IPWQS effective date
Obtain Funding	20-months from IPWQS effective date
Begin Construction	24-months from IPWQS effective date
Complete Construction	30-months from IPWQS effective date
Achieve Final Effluent Limitations	36-months from after IPWQS effective date

No later than 14-days after the completion of construction, the permittee shall submit a report in writing, both to EPA, the Pueblo of Isletta and the State Agency, stating that activities to meet this compliance schedule have been completed.

a. The permittee shall achieve compliance with all **Total Inorganic Nitrogen** final effluent limitations no later than 36-months after permit effective date.

b. The permittee shall submit a progress report outlining the status of the activities during the months of January, April, July, and October until compliance is achieved.

c. No later than 14 calendar days following the date for compliance for **Total Inorganic Nitrogen,** the permittee shall submit a written notice of compliance noncompliance.

d. Where the project completion reported is less than would be required to assure completion of construction by the required date, the report of progress shall also include an explanation for this delay and proposed remedial actions.

Written Notices:

EPA

Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-W)
U.S. EPA, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

New Mexico:

Program Manager
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110

1190 Saint Francis Drive
Santa Fe, NM 87502

Pueblo of Isleta:

Environmental Director
Pueblo of Isleta
P.O. Box 1270
Isleta, NM 87022

SECTION C. MONITORING AND REPORTING.

1. The permittee shall effectively monitor the operation and efficiency of all treatment and control facilities and the quantity and quality of the treated discharge.

2. Monitoring information required shall be submitted on Discharge Monitoring Report Form EPA 3320-1 as required in Part III, D.4.

   a. Reporting periods shall end on the last day of the month.

   b. The first Discharge Monitoring Report(s) shall represent facility operations from the effective date of the permit through the last day of the month.

   c. Thereafter, the permittee is required to make regular monthly reports as described above and shall submit those reports no later than the 15th day of the month following each reporting period. The annual sludge report required in Part IV of the permit is due on February 19 of each year and covers the previous calendar year from January 1 through December 31.

3. If any 7-day average, weekly average, or daily maximum value exceeds the effluent limitations specified in Part I.A, the permittee shall report the excursion in accordance with the requirements of Part III.D.

4. Any 30-day average, monthly average, 7-day average, weekly average, or daily maximum value reported in the required Discharge Monitoring Report which is in excess of the effluent limitation specified in Part I.A shall constitute evidence of violation of such effluent limitation and of this permit.

5. Other measurements of oxygen demand (e.g., TOC and COD) may be substituted for five-day Biochemical Oxygen Demand (BOD5) or for five-day Carbonaceous Biochemical Oxygen Demand (CBOD5), as applicable, where the permittee can demonstrate long-term correlation of the method with BOD5 or CBOD5 values, as applicable. Details of the correlation procedures used must be submitted and prior approval granted by the permitting authority for this procedure to be acceptable. Data reported must also include evidence to show that the proper correlation continues to exist after approval.

6. The permittee shall report all overflows with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary). Overflows which endanger health or the environment shall be orally reported to EPA at (214) 665-6595 and NMED Surface Water Quality Bureau at (505) 827-0187, within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the environment, shall be provided to EPA and the NMED Surface Water Quality Bureau within 5 days of the time the permittee becomes aware of the circumstance.

7. Any noncompliance which may endanger health or the environment shall also be orally reported to the Pueblo of Isleta at (505) 869-5748 and to the U. S. Fish and Wildlife Service, Albuquerque Field office at (505) 761-4525, as soon as possible, but within 12 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the environment, shall be provided within 5 days of the time the permittee becomes aware of the circumstance.

8. RECEIVING STREAM MONITORING

The permittee shall monitor the ambient flow upstream of the discharge for each calendar day. The calendar day is defined herein as the 24-hour period commencing at 12:00 am (midnight). The flow data is to be either taken from the Central Ave. Bridge, Albuquerque, New Mexico, United States Geological Service (USGS) gauge station NM08330000, or an alternative site that the City would operate and maintain, after submitting a written request to EPA, and receiving approval in writing from EPA.

The City shall maintain a written report of this flow. The information on this report shall be current for at least three years, maintained at the treatment works, and available to EPA and/or New Mexico Environment Department (NMED) inspectors as required in Part III of this permit. Additionally, this report will also show calculations of, and record the "consecutive four-day average flow", herein designated as Qs4D. The Qs4D will be defined as the calculation of that calendars day "low flow", arithmetically averaged with the three preceding days "low flows". The Qs4D is not to be calculated by using the three preceding days Qs4D, only the three previous days actual low flow values obtained from the stream gauge. Included in each December Discharge Monitoring Report (DMR) filing, the facility shall send a copy of this report to both EPA and the State of New Mexico.

For DMR reporting requirements, the facility shall report the monthly Qs4D on the monthly DMR. The monthly Qs4D will be used to determine the appropriate flow rate for those pollutant limits that are based on either stream flow and/or stream flow and time (season). The monthly Qs4D shall be defined as the arithmetic average of all calculated Qs4D's for the calendar month. In addition, the facility shall report on the DMR form the minimum Qs4D during that month.

In the event the facility requests an alternative flow station, and receives written approval from EPA, that approval would contain language that would apply to operation, maintenance, calibration, inspection, record keeping and other conditions deemed necessary by EPA to ensure flow accuracy and reliability. Instead of the permittee installing and maintaining instream flow monitoring equipment, daily flow measurements taken by the USGS at the site referenced above.

SECTION A. OTHER REQUIREMENTS.

1. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

a. The permittee shall operate an industrial pretreatment program in accordance with Section 402(b)(8) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403) and tl approved POTW pretreatment program submitted by the permittee. The pretreatment program w approved on September 21, 1985 and modified on March 24, 1997. The POTW pretreatment program and the approved modifications are hereby incorporated by reference and shall be implemented in a manner consistent with the following requirements:

(1) Industrial user information shall be updated at a frequency adequate to ensure that all Industrial Users (IUs) are properly characterized at all times;

(2) The frequency and nature of industrial user compliance monitoring activities by the permittee shall be commensurate with the character, consistency and volume of waste. However, in keeping with the requirements of 40 CFR 403.8 (f)(2)(v), the permittee must inspect and sample the effluent from each Significant Industrial User at least once a year. This is in addition to any industrial self-monitoring activities;

(3) The permittee shall enforce and obtain remedies for noncompliance by any industrial user: with applicable pretreatment standards and requirements;

(4) The permittee shall control through permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements. In the case of Industrial Users identified as significant under 40 CFR 403.3(t), this control shall be achieved through permits or equivalent individual control mechanisms issued to each such user. Such control mechanisms must be enforceable and contain, at a minimum, the following conditions:

(i) Statement of duration (in no case more than five years);

(ii) Statement of non-transferability without, at a minimum, prior notification t the POTW and provision of a copy of the existing control mechanism to the new owner or operator;

(iii) Effluent limits based on applicable general pretreatment standards, categorical pretreatment standards, local limits, and State and local law;

(iv) Self-monitoring, sampling, reporting, notification and recordkeeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in 40 CFR 403, categorical pretreatment standards, local limits, and State and local law; and

(v) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance

schedule. Such schedules may not extend the compliance date beyond federal deadlines.

(5) The permittee shall evaluate, at least once every two years, whether each Significant Industrial User needs a plan to control slug discharges. If the POTW decides that a slug control plan is needed, the plan shall contain at least the minimum elements required in 40 CFR 403.8 (f)(2)(v);

(6) The permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program; and,

(7) The approved program shall not be modified by the permittee without the prior approval of the EPA.

b. The permittee shall establish and enforce specific limits to implement the provisions of 40 CFR Parts 403.5(a) and (b), as required by 40 CFR Part 403.5(c). **Each POTW with an approved pretreatment program shall continue to develop these limits as necessary and effectively enforce such limits.**

The permittee shall, within sixty (60) days of the effective date of this permit, (1) submit a **WRITTEN CERTIFICATION** that a technical evaluation has demonstrated that the existing technically based local limits (TBLL) are based on current state water quality standards and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination, **OR** (2) submit a **WRITTEN NOTIFICATION** that a technical evaluation revising the current TBLL and a dra sewer use ordinance which incorporates such revisions will be submitted within 12 months of the effective date of this permit.

All specific prohibitions or limits developed under this requirement are deemed to be conditions of this permit. The specific prohibitions set out in 40 CFR Part 403.5(b) shall be enforced by the permittee unless modified under this provision.

c. The permittee shall analyze the treatment facility influent and effluent for the presence of the toxic pollutants listed in 40 CFR 122 Appendix D (NPDES Application Testing Requirements) Table II at least **Once/6 Months** and the toxic pollutants in Table III at least **Once/2 Months**. If, based upon information available to the permittee, there is reason to suspect the presence of any toxic or hazardous pollutant listed in Table V, or any other pollutant, known or suspected to adversely affect treatment plant operation, receiving water quality, or solids disposal procedures, analysis for those pollutants shall be performed at least **Once/2 Months** on both the influent and the effluent.

The influent and effluent samples collected shall be composite samples consisting of at least 12 aliquots collected at approximately equal intervals over a representative 24 hour period and composited according to flow. **Sampling and analytical procedures shall be in accordance with guidelines established in 40 CFR 136. The effluent samples shall be analyzed to a level as required in (f) below.** Where composite samples are inappropriate, due to sampling, holding time, or analytical constraints, at least 4 grab samples, taken at equal intervals over a representat 24 hour period, shall be taken.

d. The permittee shall prepare annually a list of Industrial Users which during the preceding twelve months were in significant noncompliance with applicable pretreatment requirements. For the purposes of this Part, significant noncompliance shall be determined based upon the more stringe of either criteria established at 40 CFR Part 403.8(f)(2)(vii) [rev. 7/24/90] or criteria established i the approved POTW pretreatment program. This list is to be published annually in the largest dai newspaper in the municipality during the month of **September**.

In addition, during the month of **September** the permittee shall submit an updated pretreatment program status report to EPA and the State containing the following information:

(1) An updated list of all significant industrial users. For each industrial user listed the following information shall be included:

(i) Standard Industrial Classification (SIC) code and categorical determination;

(ii) Control document status. Whether the user has an effective control document, and the date such document was last issued, reissued, or modified, (indicate which industrial users were added to the system (or newly identified) within the previous 12 months);

(iii) A summary of all monitoring activities performed within the previous 12 months. The following information shall be reported:

* total number of inspections performed;
* total number of sampling visits made;

(iv) Status of compliance with both effluent limitations and reporting requirements. Compliance status shall be defined as follows:

* Compliant (C) - no violations during the previous 12 month period;

* Non-compliant (NC) - one or more violations during the previous 12 month but does not meet the criteria for significantly noncompliant industrial users;

* Significant Noncompliance (SN) - in accordance with requirements described in d. above; and

(v) For significantly noncompliant industrial users, indicate the nature of the violations the type and number of actions taken (notice of violation, administrative order, criminal or civil suit, fines or penalties collected, etc.) and current compliance status. If ANY industrial user was on a schedule to attain compliance with effluent limits, indicate the date the schedule was issued and the date compliance is to be attained;

(2) A list of all significant industrial users whose authorization to discharge was terminated or revoked during the preceding 12 month period and the reason for termination;

(3) A report on any interference, pass through, upset or POTW permit violations known or suspected to be caused by industrial contributors and actions taken by the permittee in response;

(4) The results of all influent and effluent analyses performed pursuant to Part II(A)(1)(c) above;

(5) A copy of the newspaper publication of the significantly noncompliant industrial users giving the name of the newspaper and the date published;

(6) The information requested may be submitted in tabular form as per the example tables provided for your convenience; and

(7) The monthly average water quality based effluent concentration necessary to meet the state water quality standards as developed in the approved technically based local limits.

e. The permittee shall provide adequate notice of the following:

(1) Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Act if it were directly discharging those pollutants; and

(2) Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Adequate notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works, and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

f. All effluent monitoring conducted in accordance with Part (II) (A) (1) (c) above shall meet the Minimum Quantification Levels (MQLs) shown below:

MINIMUM QUANTIFICATION LEVELS (MQLs)

METALS AND CYANIDE	REQUIRED MQL (µg/L)	EPA METHOD
Antimony (Total)[1]	60	200.7
Arsenic (Total)[1]	10	206.2
Beryllium (Total)[1]	5	200.7
Cadmium (Total)[2]	1	213.2
Chromium (Total)[1]	10	200.7
Chromium (3+)[1]	10	200.7
Chromium (6+)[1]	10	200.7
Copper (Total)[2]	10	220.2
Lead (Total)[2]	5	239.2
Mercury (Total)[1]	.2	245.1 or
Mercury (Total) MDL =0.0005 ug/l		1631
Molybdenum (Total)[9]	30	200.7
Nickel (Total)[1] [Freshwater]	40	200.7
Nickel (Total)[2] [Marine]	5	249.2
Selenium (Total)[1]	5	270.2
Silver (Total)[2]	2	272.2
Thallium (Total)[1]	10	279.2
Zinc (Total[1]	20	200.7
Cyanide (Total)[1]	10	335.3
DIOXIN		
2,3,7,8-Tetrachloro-dibenzo-p-dioxin (TCDD)[3]	.00001	1613
VOLATILE COMPOUNDS		
Acrolein[4]	50	624
Acrylonitrile[4]	50	624
Benzene[4]	10	624
Bromoform[5]	10	624
Carbon Tetrachloride[5]	10	624
Chlorobenzene[5]	10	624
Chlorodibromomethane[5]	10	624
Chloroethane[6]	50	624
2-Chloroethyl vinyl ether[4]	10	624
Chloroform[5]	10	624
Dichlorobromomethane[5]	10	624
1,1-Dichloroethane[5]	10	624
1,2-Dichloroethane[5]	10	624
1,1-Dichloroethylene[5]	10	624
1,2-Dichloropropane[5]	10	624
1,3-Dichloropropylene[5]	10	624
Ethylbenzene[5]	10	624
Methyl Bromide [Bromomethane][6]	50	624
Methyl Chloride [Chloromethane][6]	50	624
Methylene Chloride[5]	20	624

VOLATILE COMPOUNDS	REQUIRED MQL (µg/L)	EPA METHOD

1,1,2,2-Tetrachloroethane[5]	10	624
Tetrachloroethylene[5]	10	624
Toluene[5]	10	624
1,2-trans-Dichloroethylene[5]	10	624
1,1,1-Trichloroethane[5]	10	624
1,1,2-Trichloroethane[5]	10	624
Trichloroethylene[5]	10	624
Vinyl Chloride[5]	10	624

ACID COMPOUNDS

2-Chlorophenol[5]	10	625
2,4-Dichlorophenol[5]	10	625
2,4-Dimethylphenol[7]	10	625
4,6-Dinitro-o-Cresol [2 methyl 4,6-dinitrophenol[8]	50	625
2,4-Dinitrophenol[5]	50	625
2-Nitrophenol[6]	20	625
4-Nitrophenol[5]	50	625
p-Chloro-m-Cresol [4 chloro-3-methylphenol][5]	10	625
Pentachlorophenol[5]	50	625
Phenol[5]	10	625
2,4,6-Trichlorophenol[5]	10	625

BASE/NEUTRAL COMPOUNDS

Acenaphthene[5]	10	625
Acenaphthylene[5]	10	625
Anthracene[5]	10	625
Benzidine[4]	50	625
Benzo(a)anthracene[5]	10	625
Benzo(a)pyrene[5]	10	625
3,4- Benzo fluoranthene[5]	10	625
Benzo(ghi)perylene[6]	20	625
Benzo(k)fluoranthene[5]	10	625
Bis(2-chloroethoxy) methane[5]	10	625
Bis(2-chloroethyl) ether[5]	10	625
Bis(2-chloroisopropyl) ether[5]	10	625
Bis(2-ethylhexyl) phthalate[5]	10	625
4-Bromophenyl phenyl ether[5]	10	625
Butyl benzyl phthalate[5]	10	625
2-Chloronapthalene[5]	10	625
4-Chlorophenyl phenyl ether[5]	10	625
Chrysene[5]	10	625

BASE/NEUTRAL COMPOUNDS	(µg/L)	EPA METHOD
Dibenzo (a,h) anthracene[6]	20	625
1,2-Dichlorobenzene[5]	10	625
1,3-Dichlorobenzene[5]	10	625
1,4-Dichlorobenzene[5]	10	625
3,3'-Dichlorobenzidine[6]	50	625
Diethyl Phthalate[5]	10	625
Dimethyl Phthalate[5]	10	625
Di-n-Butyl Phthalate[5]	10	625
2,4-Dinitrotoluene[5]	10	625
2,6-Dinitrotoluene[5]	10	625
Di-n-octyl Phthalate[5]	10	625
1,2-Diphenylhydrazine[4]	20	625
Fluoranthene[5]	10	625
Fluorene[5]	10	625
Hexachlorobenzene[5]	10	625
Hexachlorobutadiene[5]	10	625
Hexachlorocyclopentadiene[5]	10	625
Hexachloroethane[6]	20	625
Indeno (1,2,3-cd) pyrene[6] (2,3-o-phenylene pyrene)	20	625
Isophorone[5]	10	625
Naphthalene[5]	10	625
Nitrobenzene[5]	10	625
N-nitrosodimethylamine[6]	50	625
N-nitrosodi-n-propylamine[6]	20	625
N-nitrosodiphenylamine[6]	20	625
Phenanthrene[5]	10	625
Pyrene[5]	10	625
1,2,4-Trichlorobenzene[5]	10	625

PESTICIDES		
Aldrin[7]	.05	608
Alpha-BHC[7]	.056	608
Beta-BHC[7]	.05	608
Gamma-BHC (Lindane)[7]	.05	608
Delta-BHC[7]	.05	608
Chlordane[7]	.2	608
4,4'-DDT[7]	.1	608
4,4'-DDE (p,p-DDX)[7]	.1	608
4,4'-DDD (p,p-TDE)[7]	.1	608
Dieldrin[7]	.1	608
Alpha-endosulfan[7]	.1	608
Beta-endosulfan[7]	.1	608
Endosulfan sulfate[7]	.1	608

PESTICIDES	(µg/L)	EPA METHOD
Endrin[7]	.1	608
Endrin aldehyde[7]	.1	608
Heptachlor[7]	.05	608
Heptachlor epoxide[7] (BHC-hexachlorocyclohexane)	.1	608
PCB-1242[7]	1.0	608
PCB-1254	1.0	608
PCB-1221	1.0	608
PCB-1232	1.0	608
PCB-1248	1.0	608
PCB-1260	1.0	608
PCB-1016	1.0	608
Toxaphene[7]	5.0	608

[1] Based on Contract Required Detection level(CRDL) developed pursuant to 40 CFR Part 300.430(b)(8)
[2] Method 213.2, 239.2, 220.2, 272.2
[3] Dioxin National Strategy
[4] No CRQL(Contract required Quantification Level developed pursuant to 40 CFR Part 300.430(b)(8)) established
[5] CRQL basis, equivalent to ML
[6] ML basis, higher than CRQL
[7] CRQL basis, no ML established
[8] CRQL basis, higher than ML
[9] Based on 3.3 times IDL published in 40 CFR 136, Appendix C

MONITORING RESULTS [1] FOR THE ANNUAL PRETREATMENT REPORT, REPORTING YEAR: _____, 200__ TO _____, 200__

TREATMENT PLANT : _____ NPDES PERMIT NO._____

POLLUTANT	MAHL, if applicable, in µg/L [2]	Influent Values (in µg/L)Daily Average on dates SampledEffluent Limit [3]				Effluent [3] Dates Sampled				
Antimony (Total)										
Arsenic (Total)										
Beryllium (Total)										
Cadmium (Total)										
Chromium (Total)										
Copper (Total)										
Lead (Total)										
Mercury (Total)										
Molybdenum (Total)										
Nickel (Total)										
Selenium (Total)										
Silver (Total)										
Thallium (Total)										
Zinc (Total										
Cyanide (Total)										
[4]										

[1] It is advised that the influent and effluent samples are collected considering flow detention time through each plant. Analytical MQLs should be used so that the data can also be used for Local Limits assessment and NPDES application purposes.

[2] Maximum Allowable Headworks Loading limitation in µg/L. Only complete for pollutants that have approved Technically Based Local Limits.

[3] Daily average effluent limit in the NPDES permit OR the applicable state Water Quality Standard calculated to an equivalent permit effluent limit.

[4] Record the names of any pollutants [40 CFR 122, Appendix D, Table II and/or Table V] detected and the quantity in which they were detected.

PRETREATMENT PROGRAM STATUS REPORT
UPDATED SIGNIFICANT INDUSTRIAL USERS LIST

INDUSTRIAL USER	CONTROL DOCUMENT		CASE-BY-CASE DETERMINATION	TIMES INSPECTED		TIMES SAMPLED	BMR	90 DAY COMPLIANCE	COMPLIANCE STATUS			
									REPORTS		EFFLUENT LIMITS	
	Y/N	LAST ACTION							SEMI-ANNUAL	SELF MONITORING		

SIGNIFICANTLY NONCOMPLIANT USERS - ENFORCEMENT ACTIONS TAKEN

INDUSTRIAL USER	NATURE OF VIOLATION		NUMBER OF DAYS NONCOMPLIANCE					SCHEDULE	CURRENT STATUS		COMMENTS
	REPORTS	LIMITS	CRIMINAL	OTHER			DATE ISSUED	DATE DUE			

POLLUTION PREVENTION REQUIREMENTS

(1) The permittee shall institute a program within 12 months of the effective date of the permit (or continue an existing one) directed towards optimizing the efficiency and extending the useful life of the facility. The permittee shall consider the following items in the program:

a. The influent loadings, flow and design capacity;
b. The effluent quality and plant performance;
c. The age and expected life of the wastewater treatment facility's equipment;
d. Bypasses and overflows of the tributary sewerage system and treatment works;
e. New developments at the facility;
f. Operator certification and training plans and status;
g. The financial status of the facility;
h. Preventative maintenance programs and equipment conditions and;
I. An overall evaluation of conditions at the facility.

(2) The permittee shall complete the following evaluation of the sewage sludge generated by the facility:

a. An annual quantitative tabulation of the ultimate disposition of all sewage sludge (including, but not limited to, the amount beneficially reused, landfilled, surface disposed, and incinerated).

b. An assessment of technological processes and an economic analysis evaluating the potential for beneficial reuse of all sewage sludge not currently beneficially reused, including a listing of any steps which would be required to achieve the sludge quality necessary to beneficially reuse the sludge.

c. A description of, including the expected results and the anticipated timing for, all projects in process, in planning and/or being considered which are directed towards additional beneficial reuse of sewage sludge.

d. A sludge sample analysis collected prior to ultimate re-use or disposal shall be performed for the pollutants listed in Part IV, Element 1, Section III, Table 3 of the permit.

e. A listing of the specific steps (controls/changes) which would be necessary to achieve and sustain the quality of the sludge so that the pollutant concentrations in the sludge fall below the pollutant concentration criteria listed in Part IV, Element I, Section III, Table 3 of the permit.

f. A listing of, and the anticipated timing for, all projects in process, in planning, and/or being considered which are directed towards meeting the sludge quality referenced in (e) above.

The permittee shall certify in writing, within three years of the effective date of the permit, that this information is available. This certification shall be submitted to: Environmental Protection Agency, 6EN-WC, 1445 Ross Ave, Dallas, Texas, 75202-2733

(3) It is recognized that the City of Albuquerque previously received a two-year (1992-1994) EPA Pilot Program grant to help institutionalize waste minimization through Pollution Prevention within the POTW's pretreatment program. This was in part intended to assist the City in meeting its NPDES discharge and biosolids limits. It was also intended to help the City meet NPDES required pollution prevention requirements in the other portions of this section (Part II, Section B). The City, since 1994, is recognized to have implemented a functioning pollution prevention component within the Industrial Pretreatment Program.

EPA recognizes the benefit of complimenting an industrial pretreatment program with a nonregulatory program element that is principally aimed at education, training and outreach to accomplish voluntary implementation at a diverse number of businesses that would otherwise be outside the scope and ability of a traditional pretreatment program to address. The City shall be required to continue the implementation with the pretreatment program of a nonregulatory component dedicated to education and promotion of pollution prevention. The City is required to report to EPA annually with the pretreatment program annual report a summary of pollution prevention activities performed. Activities to be reported include:

a. workshops held
b. promotional materials developed
c. targeted industries and businesses
d. attendance by invitee's
e. follow-up activities
f. case histories developed
g. any quantifiable results of waste minimization implementation
h. any nonquantifiable impacts of waste minimization implementation (e.g.,: closed loop controls, housekeeping practices, materials substitutions, treatment changes, changed practices and any others).
i. seminars attended to improve program
j. manpower and materials costs associated with program work
k. inspections performed with case studies follow-up
l. trade association contacts and meetings/presentations
m. other specific program activities not listed

EPA is committed to the principals of accomplishing waste minimization, pollution prevention and source control, and will provide available guidance, information and

assistance to assist the City. In addition, grant programs may be available and information will be supplied as available to encourage applications.

3. PERMIT MODIFICATION

In accordance with 40 CFR122.44(d), the permit may be reopened and modified during the life of the permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams or the Pueblo of Isleta Water Quality Standards are revised , or new State or Tribal water quality standards are established and/or remanded by the New Mexico Water Quality Control Commission or the Pueblo of Isleta. In addition, the permit may be reopened and modified during the life of the permit, if the procedures implementing the Water Quality Standards for Interstate and Intrastate Streams in New Mexico are either revised or promulgated by the New Mexico Environment Department, or, or if EPA revised the Pueblo of Isleta Implementation Plan, or the Pueblo of Isleta develop's its own Implementation Plan.

This permit may also be modified or revoked and reissued based on the results of ESA section 7 consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (FWS, NMFS, or collectively the "Services").

In accordance with 40 CFR Part 122.62 (s) (2), the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance. Permit modifications shall reflect the results of any of these actions and shall follow regulations listed at 40 CFR Part 124.5

The Pueblo of Isleta has revised its water quality standards, and is waiting for EPA approval. When the revised standards are approved, passed, and adopted, this permit may be modified to conform with the revised Pueblo of Isleta Water Quality Standards.

SECTION B. WHOLE EFFLUENT TOXICITY LIMITS (7-DAY CHRONIC NOEC FRESHWATER)

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S): **001**

REPORTED ON DMR AS FINAL OUTFALL:
001

CRITICAL DILUTION (%):
The applicable critical dilution for the flow conditions included in Part I of this permit are as follows:

Flows: (see Part 1, Section A for definition of Qs4D)

Qs4D <34.6 MGD (53.7 cfs)	100%
34.6 MGD ≤ Qs4D < 183 MGD (283 cfs)	69%
Qs4D ≥ 183 MGD	29%
Control	0%

EFFLUENT DILUTION SERIES (%):

Qs4D <34.6 MGD	32%, 42%, 56%, 75%, 100%
34.6 MGD ≤ Qs4D < 183 MGD	29%, 39%, 52%, 69%, 92%
Qs4D ≥ 183 MGD	12%, 16%, 22%, 29%, 39%

Note: Because the permit includes several critical dilutions, the permittee shall report in the comment field of the DMR for that reporting period, which low-flow concentration was used for the biomonitoring test conducted.

COMPOSITE SAMPLE TYPE: Defined at PART I

TEST SPECIES/METHODS: 40 CFR Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA/600/4-91/002 or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA/600/4-91/002, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The NOEC (No Observed Lethal Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution.

c. The conditions of this item are effective beginning with the effective date of the WET limit. When the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at or below the critical dilution, the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the Lethal No Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in PART I of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period.

d. This permit may be reopened to require chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

e. Test failure is defined as a demonstration of statistically significant sub-lethal or lethal effects to a test species at or below the effluent critical dilution.

2. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.

ii. The mean number of Ceriodaphnia dubia neonates produced per surviving female in the control (0% effluent) must be 15 or more.

iii. 60% of the surviving control females must produce three broods.

iv. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.

v. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the young of surviving females in the Ceriodaphnia dubia reproduction test, the growth and survival of the Fathead minnow test.

vi. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints in the Fathead minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

i. For the Ceriodaphnia dubia survival test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA/600/4-91/002 or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 2.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 3 below.

ii. For the Ceriodaphnia dubia reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/600/4-91/002, or the most recent update thereof.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water where the receiving stream is classified as intermittent or where the receiving stream has no flow due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 2.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

(A) a synthetic dilution water control which fulfills the test acceptance requirements of Item 2.a was run concurrently with the receiving water control;

(B) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

(C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 3.a below; and

(D) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect a minimum of three flow-weighted composite samples from the outfall(s) listed at Item 1.a above.

ii. The permittee shall collect second and third composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iii. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to 4 degrees Centigrade during collection, shipping, and/or storage.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 3 of this section.

v. MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in Item 1.a above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.

3. REPORTING

a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report

Preparation Section of EPA/600/4-91/002, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports upon the specific request of the Agency. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.

b. The permittee shall report the Whole Effluent Lethality values for the 30-Day Average Minimum and the 7-Day Minimum under Parameter No. 22414 on the DMR for that reporting period in accordance with PART III.D.4 of this permit.

If more than one valid test for a species was performed during the reporting period, the test NOECs will be averaged arithmetically and reported as the DAILY AVERAGE MINIMUM NOEC for that reporting period.

If more than one species is tested during the reporting period, the permittee shall report the lowest 30-Day Average Minimum NOEC and the lowest 7-Day Minimum NOEC for Whole Effluent Lethality.

A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for EPA review.

c. The permittee shall submit the results of the valid toxicity test on the DMR for that reporting period in accordance with PART III.D.4 of this permit, as follows below. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR.

i. Pimephales promelas (Fathead Minnow)

(A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP6C.

(B) Report the NOEC value for survival, Parameter No. TOP6C.

(C) Report the NOEC value for growth, Parameter No. TPP6C.

(D) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6C.

(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C.

ii. Ceriodaphnia dubia

(A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP3B.

(B) Report the NOEC value for survival, Parameter No. TOP3B.

(C) Report the NOEC value for reproduction, Parameter No. TPP3B.

(D) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3B.

(E) Report the higher (critical dilution or control) Coefficient of Variation, Parameter No. TQP3B.

Monitoring Frequency Reduction

This section does not apply to any species for which the permit establishes whole effluent toxicity (WET) limits. For the first five years after the effective date of a WET limit, the minimum monitoring frequency for the affected species is once per quarter.

a. The permittee may apply for a testing frequency reduction upon the successful completion of the first four consecutive quarters of testing for a test species, with no lethal or sub-lethal effects demonstrated at or below the critical dilution. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the less sensitive species (usually the Fathead minnow) and not less than twice per year for the more sensitive test species (usually the Daphnia pulex).

b. CERTIFICATION - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in item 3.a. above. In addition the permittee must provide a list with each test performed including test initiation date, species, NOECs for lethal and sub-lethal effects and the maximum coefficient of variation for the controls. Upon review and acceptance of this information the agency will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the agency's Permit Compliance System section to update the permit reporting requirements.

c. SURVIVAL FAILURES - If any test fails the survival endpoint at any time during the life of this permit, two monthly retests are required and the monitoring frequency for the affected test species shall be increased to once per quarter until the permit is re-issued. Monthly retesting is not required if the permittee is performing a TRE.

d. This monitoring frequency reduction applies only until the expiration date of this permit; at which time the monitoring frequency for both test species reverts to once per quarter until the permit is re-issued.

PART III - STANDARD CONDITIONS FOR NPDES PERMITS

A. GENERAL CONDITIONS

1. INTRODUCTION

In accordance with the provisions of 40 CFR Part 122.41, et. seq., this permit incorporates by reference ALL conditions and requirements applicable to NPDES Permits set forth in the Clean Water Act, as amended, (hereinafter known as the "Act") as well as ALL applicable regulations.

2. DUTY TO COMPLY

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. TOXIC POLLUTANTS

a. Notwithstanding Part III.A.5, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition.

b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

4. DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR Part 122.6 and any subsequent amendments.

5. PERMIT FLEXIBILITY

This permit may be modified, revoked and reissued, or terminated for cause in accordance with 40 CFR 122.62-64. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

7. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

8. CRIMINAL AND CIVIL LIABILITY

Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to 18 U.S.C. Section 1001.

9. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

10. STATE LAWS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

11. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

B. PROPER OPERATION AND MAINTENANCE

1. NEED TO HALT OR REDUCE NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

2. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

3. PROPER OPERATION AND MAINTENANCE

a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

4. BYPASS OF TREATMENT FACILITIES

a. BYPASS NOT EXCEEDING LIMITATIONS

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.B.4.b. and 4.c.

b. NOTICE

(1) ANTICIPATED BYPASS

If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) UNANTICIPATED BYPASS

The permittee shall, within 24 hours, submit notice of an unanticipated bypass as required in Part III.D.7.

c. PROHIBITION OF BYPASS

(1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

(c) The permittee submitted notices as required by Part III.B.4.b.

(2) The Director may allow an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed at Part III.B.4.c(1).

5. UPSET CONDITIONS

a. EFFECT OF AN UPSET

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part III.B.5.b. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. CONDITIONS NECESSARY FOR A DEMONSTRATION OF UPSET

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required by Part III.D.7; and,

(4) The permittee complied with any remedial measures required by Part III.B.2.

c. BURDEN OF PROOF
In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. REMOVED SUBSTANCES
Unless otherwise authorized, solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

7. PERCENT REMOVAL (PUBLICLY OWNED TREATMENT WORKS)
For publicly owned treatment works, the 30-day average (or Monthly Average) percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR 133.103.

C. MONITORING AND RECORDS

1. INSPECTION AND ENTRY
The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by the law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

2. REPRESENTATIVE SAMPLING
Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. RETENTION OF RECORDS
The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of

the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

4. RECORD CONTENTS

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) and time(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

5. MONITORING PROCEDURES

a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.

c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

6. FLOW MEASUREMENTS

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

D. REPORTING REQUIREMENTS

1. PLANNED CHANGES

a. INDUSTRIAL PERMITS

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or,

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements listed at Part III.D.10.a.

b. MUNICIPAL PERMITS

Any change in the facility discharge (including the introduction of any new source or significant discharge or significant changes in the quantity or quality of existing discharges of pollutants) must be reported to the permitting authority. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. ANTICIPATED NONCOMPLIANCE

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. TRANSFERS

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

4. DISCHARGE MONITORING REPORTS AND OTHER REPORTS

Monitoring results must be reported on Discharge Monitoring Report (DMR) Form EPA No. 3320-1 in accordance with the "General Instructions" provided on the form. The permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA at the address below. DMR's and all other reports shall be submitted to EPA, NMED, and Pueblo of Isleta at the following addresses:

EPA:
Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-W)
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

New Mexico:
Program Manager
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110
1190 Saint Francis Drive
Santa Fe, NM 87502

Pueblo of Isleta:
Environmental Director
Pueblo of Isleta
P.O. Box 1270
Isleta, NM 87022
The permittee shall also submit a copy of an annual summary of the data that results from whole effluent toxicity testing to:

Field Supervisor
U.S. Fish and Wildlife Services Field Office
2105 Osuna NE
Albuquerque, NM 87113

5. ADDITIONAL MONITORING BY THE PERMITTEE

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.

6. AVERAGING OF MEASUREMENTS

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

7. TWENTY-FOUR HOUR REPORTING

a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission

shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

(1) A description of the noncompliance and its cause;

(2) The period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,

(3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. The following shall be included as information which must be reported within 24 hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and,

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part II (industrial permits only) of the permit to be reported within 24 hours.

c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

8. OTHER NONCOMPLIANCE

The permittee shall report all instances of noncompliance not reported under Parts III.D.4 and D.7 and Part I.B (for industrial permits only) at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.7.

9. OTHER INFORMATION

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

10. CHANGES IN DISCHARGES OF TOXIC SUBSTANCES

All existing manufacturing, commercial, mining, and silvacultural permittees shall notify the Director as soon as it knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in

the permit, if that discharge will exceed the highest of the following "notification levels":

(1) One hundred micrograms per liter (100 µg/L);
(2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
(4) The level established by the Director.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) Five hundred micrograms per liter (500 µg/L);
(2) One milligram per liter (1 mg/L) for antimony;
(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
(4) The level established by the Director.

11. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Director shall be signed and certified.

a. ALL PERMIT APPLICATIONS shall be signed as follows:

(1) FOR A CORPORATION - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,

(b) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and

regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) FOR A PARTNERSHIP OR SOLE PROPRIETORSHIP - by a general partner or the proprietor, respectively.

(3) FOR A MUNICIPALITY, STATE, FEDERAL, OR OTHER PUBLIC AGENCY - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(a) The chief executive officer of the agency, or

(b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

b. ALL REPORTS required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

(3) The written authorization is submitted to the Director.

c. CERTIFICATION

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the

information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. AVAILABILITY OF REPORTS

Except for applications, effluent data, permits, and other data specified in 40 CFR 122.7, any information submitted pursuant to this permit may be claimed as confidential by the submitter. If no claim is made at the time of submission, information may be made available to the public without further notice.

E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

1. CRIMINAL

a. NEGLIGENT VIOLATIONS

The Act provides that any person who negligently violates permit conditions implementing Section 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both..

b. KNOWING VIOLATIONS

The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

c. KNOWING ENDANGERMENT

The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both.

d. FALSE STATEMENTS

The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be

by a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See Section 309.c.4 of the Clean Water Act)

2. CIVIL PENALTIES
The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed $27,500 per day for each violation.

3. ADMINISTRATIVE PENALTIES
The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

a. CLASS I PENALTY
Not to exceed $11,000 per violation nor shall the maximum amount exceed $27,500.

b. CLASS II PENALTY
Not to exceed $11,000 per day for each day during which the violation continues nor shall the maximum amount exceed $137,500.

F. DEFINITIONS
All definitions contained in Section 502 of the Act shall apply to this permit and are incorporated herein by reference. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

1. ACT means the Clean Water Act (33 U.S.C. 1251 et. seq.), as amended.

2. ADMINISTRATOR means the Administrator of the U.S. Environmental Protection Agency.

3. APPLICABLE EFFLUENT STANDARDS AND LIMITATIONS means all state and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards or performance, toxic effluent standards and prohibitions, and pretreatment standards.

4. APPLICABLE WATER QUALITY STANDARDS means all water quality standards to which a discharge is subject under the Act.

5. BYPASS means the intentional diversion of waste streams from any portion of a treatment facility.

6. DAILY DISCHARGE means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of

sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day. "Daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be arithmetic average (weighted by flow value) of all samples collected during that sampling day.

7. DAILY MAXIMUM discharge limitation means the highest allowable "daily discharge" during the calendar month.

8. DIRECTOR means the U.S. Environmental Protection Agency Regional Administrator or an authorized representative.

9. ENVIRONMENTAL PROTECTION AGENCY means the U.S. Environmental Protection Agency.

10. GRAB SAMPLE means an individual sample collected in less than 15 minutes.

11. INDUSTRIAL USER means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.

12. MONTHLY AVERAGE (also known as DAILY AVERAGE) discharge limitations means the highest allowable average of "daily discharge(s)" over a calendar month, calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes daily average concentration effluent limitations or conditions, the daily average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily concentration, F = daily flow, and n = number of daily samples; daily average discharge =

$$\frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

13. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Act.

14. SEVERE PROPERTY DAMAGE means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the

absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

15. SEWAGE SLUDGE means the solids, residues, and precipitates separated from or created in sewage by the unit processes of a publicly owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff, that are discharged to or otherwise enter a publicly owned treatment works.

16. TREATMENT WORKS means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof.

17. UPSET means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

18. FOR FECAL COLIFORM BACTERIA, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.

19. The term "MGD" shall mean million gallons per day.

20. The term "mg/L" shall mean milligrams per liter or parts per million (ppm).

21. The term "µg/L" shall mean micrograms per liter or parts per billion (ppb).

22. MUNICIPAL TERMS

    a. 7-DAY AVERAGE or WEEKLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. The 7-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

    b. 30-DAY AVERAGE or MONTHLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples

collected during a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The 30-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

c. 24-HOUR COMPOSITE SAMPLE consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample collected at frequent intervals proportional to flow over the 24-hour period.

d. 12-HOUR COMPOSITE SAMPLE consists of 12 effluent portions collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.

e. 6-HOUR COMPOSITE SAMPLE consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.

f. 3-HOUR COMPOSITE SAMPLE consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.

SEWAGE SLUDGE REQUIREMENTS

INSTRUCTIONS TO PERMITTEES

Select only those Elements and Sections which apply to your sludge reuse or disposal practice.

If your facility utilizes more than one type of disposal or reuse method (for example, Element I and Element II apply) or the quality of your sludge varies (for example, Section II and Section III of Element I apply) use a separate Discharge Monitoring Report (DMR) for each Section that is applicable.

The sludge DMRs shall be due by February 19th of each year and shall cover the previous January through December time period.

The sludge conditions do not apply to wastewater treatment lagoons where sludge is not wasted for final reuse/disposal. If the sludge is not removed, the permittee shall indicate on the DMR "No Discharge".

ELEMENT 1 - LAND APPLICATION

ELEMENT 2 - SURFACE DISPOSAL

ELEMENT 3 - MUNICIPAL SOLID WASTE LANDFILL DISPOSAL

ELEMENT 1 - LAND APPLICATION

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with Section 405 of the Clean Water Act and all other applicable Federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present in the sludge.

2. If requirements for sludge management practices or pollutant criteria become more stringent than the sludge pollutant limits or acceptable management practices in this permit, or control a pollutant not listed in this permit, this permit may be modified or revoked and reissued to conform to the requirements promulgated at Section 405(d)(2) of the Clean Water Act. If new limits for Molybdenum are promulgated prior to permit expiration, then those limits shall become directly enforceable.

3. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.

4. The permittee shall give prior notice to EPA (Chief, Permits Branch, Water Management Division, Mail Code 6W-P, EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202) of any planned changes in the sewage sludge disposal practice, in accordance with 40 CFR Part 122.41(l)(1)(iii). These changes may justify the application of permit conditions that are different from or absent in the existing permit. Change in the sludge use or disposal practice may be cause for modification of the permit in accordance with 40 CFR Part 122.62(a)(1).

B. Testing Requirements

1. Sewage sludge shall be tested once during the life of the permit within one year from the effective date of the permit in accordance with the method specified at 40 CFR 268, Appendix I (Toxicity Characteristic Leaching Procedure (TCLP)) or other approved methods. Sludge shall be tested after final treatment prior to leaving the POTW site. Sewage sludge determined to be a hazardous waste in accordance with 40 CFR Part 261, shall be handled according to RCRA standards for the disposal of hazardous waste in accordance with 40 CFR Part 262. The disposal of sewage sludge determined to be a hazardous waste, in other than a certified hazardous waste disposal facility shall be prohibited. The Information Management Section, telephone no. (214) 665-6750, and the appropriate state agency shall be notified of test failure within 24 hours. A written report shall be provided to this office within 7 days after failing the TCLP. The report will contain test results, certification that unauthorized disposal has not occurred and a summary of alternative disposal plans that comply with RCRA standards for the disposal of hazardous waste. The report shall be addressed to: Director, Multimedia Planning and Permitting Division, EPA Region 6, Mail Code 6PD, 1445 Ross Avenue, Dallas, Texas 75202. A copy of this report shall be sent to the Chief, Water Enforcement Branch, Compliance Assurance and Enforcement Division, Mail Code 6EN-W, at the same street address.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceed the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Element 1, Section I.C.

TABLE 1

Ceiling Concentration

Pollutant	(milligrams per kilogram)*
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by either the Class A or Class B pathogen requirements. Sewage sludge that is applied to a lawn or home garden shall be treated by the Class A pathogen requirements. Sewage sludge that is sold or given away in a bag shall be treated by Class A pathogen requirements.

a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. All 6 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or given away in a bag or other container for application to the land. Below are the additional requirements necessary to meet the definition of a Class A sludge. Alternatives 5 and 6 are not authorized to demonstrate compliance with Class A sewage sludge in Texas permits.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at a specific value for a period of time. See 503.32(a)(3)(ii) for specific information. This alternative is not applicable to composting.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 and shall remain above 12 for 72 hours. The pH shall be defined as the logarithm of the reciprocal of the hydrogen ion concentration measured at 25°C or measured at another temperature and then converted to an equivalent value at 25°C.

The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12.

At the end of the 72 hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50 percent.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 503.32(a)(5)(ii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 503.32(a)(5)(iii) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed or at the time the sludge is prepared for sale or give away in a bag or other container for application to the land.

The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land.

Alternative 5 - Sewage sludge shall be treated by one of the Processes to Further Reduce Pathogens (PFRP) described in 503 Appendix B. PFRPs include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 - Sewage sludge shall be treated by a process that is equivalent to a Process to Further Reduce Pathogens, if individually approved by the Pathogen Equivalency Committee representing the EPA.

b. Three alternatives are available to demonstrate compliance with Class B sewage sludge. Alternatives 2 and 3 are not authorized to demonstrate compliance with Class B sewage sludge in Texas permits.

Alternative 1 - (i) Seven representative samples of the sewage sludge that is used shall be collected for one monitoring episode at the time the sewage sludge is used or disposed.

(ii) The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge shall be treated in one of the Processes to significantly Reduce Pathogens described in 503 Appendix B.

Alternative 3 - Sewage sludge shall be treated in a process that is equivalent to a PSRP, if individually approved by the Pathogen Equivalency Committee representing the EPA.

In addition, the following site restrictions must be met if Class B sludge is land applied:

i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.

v. Animals shall not be grazed on the land for 30 days after application of sewage sludge.

vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following alternatives 1 through 10 for Vector Attraction Reduction. If bulk sewage sludge is applied to a home garden, or bagged sewage sludge is applied to the land, only alternative 1 through alternative 8 shall be used.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Volatile solids must be reduced by less than 17 percent to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. Volatile solids must be reduced by less than 15 percent to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 - (i) Sewage sludge shall be injected below the surface of the land.

(ii) No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

(iii) When sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface

within eight hours after being discharged from the pathogen treatment process.

Alternative 10 - (i) Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

(ii) When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test - Once/Permit Life, performed within one year from the effective date of the permit

PCBs - Once/Year

All other pollutants shall be monitored at the frequency shown below:

Amount of sewage sludge* (metric tons per 365 day period)	Frequency
0 ≤ Sludge < 290	Once/Year
290 ≤ Sludge < 1,500	Once/Quarter
1,500 ≤ Sludge < 15,000	Once/Two Months
15,000 ≤ Sludge	Once/Month

* Either the amount of bulk sewage sludge applied to the land or the amount of sewage sludge received by a person who prepares sewage sludge that is sold or given away in a bag or other container for application to the land (dry weight basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 40 CFR 503.8(b).

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below those listed in Table 3 found in Element I, Section III, the following conditions apply:

1. Pollutant Limits

Table 2

Pollutant	Cumulative Pollutant Loading Rate (kilograms per hectare)
Arsenic	41
Cadmium	39
Copper	1500

Lead	300
Mercury	17
Molybdenum	Report
Nickel	420
Selenium	100
Zinc	2800

2. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, or lawn or home garden shall be treated by either Class A or Class B pathogen reduction requirements as defined above in Element 1, Section I.B.3.

3. Management Practices

a. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters of the U.S., as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to section 404 of the CWA.

b. Bulk sewage sludge shall not be applied within 10 meters of a water of the U.S.

c. Bulk sewage sludge shall be applied at or below the agronomic rate in accordance with recommendations from the following references:

i. STANDARDS 1992, Standards, Engineering Practices and Data, 39th Edition (1992) American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085-9659.

ii. National Engineering Handbook Part 651, Agricultural Waste Management Field Handbook (1992), P.O. Box 2890, Washington, D.C. 20013.

iii. Recommendations of local extension services or Soil Conservation Services.

iv. Recommendations of a major University's Agronomic Department.

d. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:

i. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

ii. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the label or information sheet.

iii. The annual whole sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Element I, Section III below are met.

4. Notification requirements

a. If bulk sewage sludge is applied to land in a State other than the State in which the sludge is prepared, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:

i. The location, by either street address or latitude and longitude, of each land application site.

ii. The approximate time period bulk sewage sludge will be applied to the site.

iii. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who prepares the bulk sewage sludge.

iv. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.

b. The permittee shall give 60 days prior notice to the Director of any change planned in the sewage sludge practice. Any change shall include any planned physical alterations or additions to the permitted treatment works, changes in the permittee's sludge use or disposal practice, and also alterations, additions, or deletions of disposal sites. These changes may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional disposal sites not reported during the permit application process or absent in the existing permit. Change in the sludge use or disposal practice may be cause for modification of the permit in accordance with 40 CFR 122.62(a)(1).

c. The permittee shall provide the location of all new sludge disposal/use sites where previously undisturbed ground is proposed for disturbance to the State Historical Commission within 90 days of the effective date of this permit. In addition, the permittee shall provide the location of any new disposal/use site to the State Historical Commission prior to use of the site.

The permittee shall within 30 days after notification by the State Historical Commission that a specific sludge disposal/use area will adversely effect a National Historic Site, cease use of such area.

5. Recordkeeping Requirements - The sludge documents will be retained on site at the same location as other NPDES records.

The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information for <u>five years</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for recordkeeping found in 40 CFR 503.17 for persons who land apply.

a. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 3 found in Element I, Section III and the applicable pollutant concentration criteria (mg/Kg), <u>or</u> the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (kg/ha) listed in Table 2 above.

b. A description of how the pathogen reduction requirements are met (including site restrictions for Class B sludges, if applicable).

c. A description of how the vector attraction reduction requirements are met.

d. A description of how the management practices listed above in Section II.3 are being met.

e. The recommended agronomic loading rate from the references listed in Section II.3.c. above, as well as the actual agronomic loading rate shall be retained.

f. A description of how the site restrictions in 40 CFR Part 503.32(b)(5) are met for each site on which Class B bulk sewage sludge is applied.

g. The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in §503.14 have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information

used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

h. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 40 CFR 503.17(a)(4)(i)(B) or 40 CFR Part 503.17(a)(5)(i)(B) as applicable to the permittees sludge treatment activities.

i. The permittee shall maintain information that describes future geographical areas where sludge may be land applied.

j. The permittee shall maintain information identifying site selection criteria regarding land application sites not identified at the time of permit application submission.

k. The permittee shall maintain information regarding how future land application sites will be managed.

The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for recordkeeping found in 40 CFR 503.17 for persons who land apply.

a. The location, by either street address or latitude and longitude, of each site on which sludge is applied.

b. The number of hectares in each site on which bulk sludge is applied.

c. The date and time sludge is applied to each site.

d. The cumulative amount of each pollutant in kilograms/hectare listed in Table 2 applied to each site.

e. The total amount of sludge applied to each site in metric tons.

f. The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the requirements to obtain information in §503.12(e)(2) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

g. A description of how the requirements to obtain information in §503.12(e)(2) are met.

6. Reporting Requirements - The permittee shall report annually on the DMR the following information:

a. Pollutant Table (2 or 3) appropriate for permittee's land application practices.

b. The frequency of monitoring listed in Element 1, Section I.C. which applies to the permittee.

c. Toxicity Characteristic Leaching Procedure (TCLP) results (Pass/Fail).

d. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/Kg) listed in Table 3 found in Element 1, Section III, or the applicable pollutant loading rate limit (kg/ha) listed in Table 2 above if it exceeds 90% of the limit.

e. Level of pathogen reduction achieved (Class A or Class B).

f. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met in the DMR comment section or attach a separate sheet to the DMR.

g. Vector attraction reduction alternative used as listed in Section I.B.4.

h. Annual sludge production in dry metric tons/year.

i. Amount of sludge land applied in dry metric tons/year.

j. Amount of sludge transported interstate in dry metric tons/year.

k. The certification statement listed in 503.17(a)(4)(i)(B) or 503.17(a)(5)(i)(B) whichever applies to the permittees sludge treatment activities shall be attached to the DMR.

l. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the DMR.

i. The location, by either street address or latitude and longitude.

ii. The number of hectares in each site on which bulk sewage sludge is applied.

iii. The date and time bulk sewage sludge is applied to each site.

iv. The cumulative amount of each pollutant (i.e., kilograms/hectare) listed in Table 2 in the bulk sewage sludge applied to each site.

v. The amount of sewage sludge (i.e., metric tons) applied to each site.

vi. The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the requirements to obtain information in 40 CFR 503.12(e)(2) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

vii. A description of how the requirements to obtain information in 40 CFR 503.12(e)(2) are met.

SECTION III. REQUIREMENTS SPECIFIC TO BULK OR BAGGED SEWAGE SLUDGE MEETING POLLUTANT CONCENTRATIONS IN TABLE 3 AND CLASS A PATHOGEN REDUCTION REQUIREMENTS

For those permittees with sludge that contains concentrations of pollutants below those pollutant limits listed in Table 3 for bulk or bagged (containerized) sewage sludge and also meet the Class A pathogen reduction requirements, the following conditions apply (Note: All bagged sewage sludge must be treated by Class A pathogen reduction requirements.):

1. Pollutant limits - The concentration of the pollutants in the municipal sewage sludge is at or below the values listed.

Table 3

Pollutant	Monthly Average Concentration (milligrams per kilogram)*

Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report
Nickel	420
Selenium	100
Zinc	2800

* Dry weight basis

2. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, or lawn or home garden shall be treated by the Class A pathogen reduction requirements as defined above in Element I, Section I.B.3. All bagged sewage sludge must be treated by Class A pathogen reduction requirements.

3. Management Practices - None.

4. Notification Requirements - None.

5. Recordkeeping Requirements - The permittee shall develop the following information and shall retain the information for five years. The sludge documents will be retained on site at the same location as other NPDES records.

   a. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 3 and the applicable pollutant concentration criteria listed in Table 3.

   b. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 503.17(a)(1)(ii) or 503.17(a)(3)(i)(B), whichever applies to the permittees sludge treatment activities.

   c. A description of how the Class A pathogen reduction requirements are met.

   d. A description of how the vector attraction reduction requirements are met.

6. Reporting Requirements - The permittee shall report annually on the DMR the following information:

   a. Pollutant Table 3 appropriate for permittee's land application practices.

   b. The frequency of monitoring listed in Element 1, Section I.C. which applies to the permittee.

   c. Toxicity Characteristic Leaching Procedure (TCLP) results. (Pass/Fail).

   d. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) found in Element 1, Section I. In addition, the applicable pollutant concentration criteria listed in Table 3 should be included on the DMR.

   e. Pathogen reduction Alternative used for Class A bagged or bulk sludge as listed in Section I.B.3.a.

   f. Vector attraction reduction Alternative used as listed in Section I.B.4.

   g. Annual sludge production in dry metric tons/year.

   h. Amount of sludge land applied in dry metric tons/year.

i. Amount of sludge transported interstate in dry metric tons/year.

j. The certification statement listed in 503.17(a)(1)(ii) or 503.17(a)(3)(i)(B), whichever applies to the permittees sludge treatment activities, shall be attached to the DMR.

SECTION IV. REQUIREMENTS SPECIFIC TO SLUDGE SOLD OR GIVEN AWAY IN A BAG OR OTHER CONTAINER FOR APPLICATION TO THE LAND THAT DOES NOT MEET THE MINIMUM POLLUTANT CONCENTRATIONS

1. Pollutant Limits

Table 4

Pollutant	Annual Pollutant Loading Rate (kilograms per hectare per 365 day period)
Arsenic	2
Cadmium	1.9
Copper	75
Lead	15
Mercury	0.85
Molybdenum	Report
Nickel	21
Selenium	5
Zinc	140

2. Pathogen Control

All sewage sludge that is sold or given away in a bag or other container for application to the land shall be treated by the Class A pathogen requirements as defined in Section I.B.3.a.

3. Management Practices

Either a label shall be affixed to the bag or other container in which sewage sludge that is sold or given away for application to the land, or an information sheet shall be provided to the person who receives sewage sludge sold or given away in an other container for application to the land. The label or information sheet shall contain the following information:

a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the label or information sheet.

c. The annual whole sludge application rate for the sewage sludge that will not cause any of the annual pollutant loading rates in Table 4 above to be exceeded.

4. Notification Requirements - None.

5. Recordkeeping Requirements - The sludge documents will be retained on site at the same location as other NPDES records.

The person who prepares sewage sludge or a sewage sludge material shall develop the following information and shall

retain the information for five years.

a. The concentration in the sludge of each pollutant listed above in found in Element I, Section I, Table 1.

b. The following certification statement found in 503.17(a)(6)(iii).

"I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in §503.14(e), the Class A pathogen requirement in §503.32(a), and the vector attraction reduction requirement in (insert vector attraction reduction option) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices, pathogen requirements, and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment".

c. A description of how the Class A pathogen reduction requirements are met.

d. A description of how the vector attraction reduction requirements are met.

e. The annual whole sludge application rate for the sewage sludge that does not cause the annual pollutant loading rates in Table 4 to be exceeded. See Appendix A to Part 503 - Procedure to Determine the Annual Whole Sludge Application Rate for a Sewage Sludge.

6. Reporting Requirements - The permittee shall report annually on the DMR the following information:

a. List Pollutant Table 4 appropriate for permittee's land application practices.

b. The frequency of monitoring listed in Element 1, Section I.C. which applies to the permittee.

c. Toxicity Characteristic Leaching Procedure (TCLP) results (Pass/Fail).

d. The concentration (mg/Kg) in the sludge of each pollutant listed above in Table 1 (defined as a monthly average) found in Element 1, Section I.

e. Class A pathogen reduction Alternative used as listed in Section I.B.3.a. Alternatives describe how the pathogen reduction requirements are met.

f. Vector attraction reduction Alternative used as listed in Section I.B.4.

g. Annual sludge production in dry metric tons/year.

h. Amount of sludge land applied in dry metric tons/year.

i. Amount of sludge transported interstate in dry metric tons/year.

j. The following certification statement found in § 503.17(a)(6)(iii) shall be attached to the DMR.

"I certify, under penalty of law, that the information that will be used to determine compliance with the management practice in §503.14(e), the Class A pathogen requirement in §503.32(a), and the vector attraction reduction requirement (insert appropriate option) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel gather and evaluate the information used to determine that the management practice, pathogen requirements, and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

ELEMENT 2- SURFACE DISPOSAL

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE SURFACE DISPOSAL

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with Section 405 of the Clean Water Act and all other applicable Federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present.

2. If requirements for sludge management practices or pollutant criteria become more stringent than the sludge pollutant limits or acceptable management practices in this permit, or control a pollutant not listed in this permit, this permit may be modified or revoked and reissued to conform to the requirements promulgated at Section 405(d)(2) of the Clean Water Act.

3. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person (owner or operator of a sewage sludge unit) for disposal in a surface disposal site, the permit holder shall provide all necessary information to the parties who receive the sludge to assure compliance with these regulations.

4. The permittee shall give prior notice to EPA (Chief, Permits Branch, Water Management Division, Mail Code 6W-P, EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202) of any planned changes in the sewage sludge disposal practice, in accordance with 40 CFR Part 122.41(l)(1)(iii). These changes may justify the application of permit conditions that are different from or absent in the existing permit. Change in the sludge use or disposal practice may be cause for modification of the permit in accordance with 40 CFR Part 122.62(a)(1).

5. The permittee or owner/operator shall submit a written closure and post closure plan to the permitting authority 180 days prior to the closure date. The plan shall include the following information:

   (a) A discussion of how the leachate collection system will be operated and maintained for three years after the surface disposal site closes if it has a liner and leachate collection system.

   (b) A description of the system used to monitor continuously for methane gas in the air in any structures within the surface disposal site. The methane gas concentration shall not exceed 25% of the lower explosive limit for methane gas for three years after the sewage sludge unit closes. A description of the system used to monitor for methane gas in the air at the property line of the site shall be included. The methane gas concentration at the surface disposal site property line shall not exceed the lower explosive limit for methane gas for three years after the sewage sludge unit closes.

   (c) A discussion of how public access to the surface disposal site will be restricted for three years after it closes.

B. Management Practices

1. An active sewage sludge unit located within 60 meters of a fault that has displacement in Holocene time shall close by March 22, 1994.

2. An active sewage sludge unit located in an unstable area shall close by March 22, 1994.

3. An active sewage sludge unit located in a wetland shall close by March 22, 1994.

4. Surface disposal shall not restrict the flow of the base 100-year flood.

5. The run-off collection system for an active sewage sludge unit shall have the capacity to handle run-off from a 25-year, 24-hour storm event.

6. A food crop, feed crop, or a fiber crop shall not be grown on a surface disposal site.

7. Animals shall not be grazed on a surface disposal site.

8. Public access shall be restricted on the active surface disposal site and for three years after the site closes.

9. Placement of sewage sludge shall not contaminate an aquifer. This shall be demonstrated through one of the following:

(a) Results of a ground-water monitoring program developed by a qualified ground-water scientist.

(b) A certification by a qualified ground-water scientist may be used to demonstrate that sewage sludge placed on an active sewage sludge unit does not contaminate an aquifer.

10. When a cover is placed on an active surface disposal site, the concentration of methane gas in air in any structure within the surface disposal site shall not exceed 25 percent of the lower explosive limit for methane gas during the period that the sewage sludge unit is active. The concentration of methane gas in air at the property line of the surface disposal site shall not exceed the lower explosive limit for methane gas during the period that the sewage sludge unit is active. Monitoring shall be continuous.

C. Testing Requirements

1. Sewage sludge shall be tested once during the life of the permit within one year from the effective date of the permit in accordance with the method specified at 40 CFR 268, Appendix I (Toxicity Characteristic Leaching Procedure (TCLP)) or other approved methods. Sludge shall be tested after final treatment prior to leaving the POTW site. Sewage sludge determined to be a hazardous waste in accordance with 40 CFR Part 261, shall be handled according to RCRA standards for the disposal of hazardous waste in accordance with 40 CFR Part 262. The disposal of sewage sludge determined to be a hazardous waste, in other than a certified hazardous waste disposal facility shall be prohibited. The Information Management Section, telephone no. (214) 665-6750, and the appropriate state agency shall be notified of test failure within 24 hours. A written report shall be provided to this office within 7 days after failing the TCLP. The report will contain test results, certification that unauthorized disposal has not occurred and a summary of alternative disposal plans that comply with RCRA standards for the disposal of hazardous waste. The report shall be addressed to: Director, Multimedia Planning and Permitting Division, EPA Region 6, Mail Code 6PD, 1445 Ross Avenue, Dallas, Texas 75202. A copy of this report shall be sent to the Chief, Water Enforcement Branch, Compliance Assurance and Enforcement Division, Mail Code 6EN-W, at the same street address.

2. Sewage sludge shall be tested at the frequency show below in Element 2, Section I.D. for PCBs. Any sludge exceeding a concentration of 50 mg/Kg shall not be surface disposed.

3. Pathogen Control

All sewage sludge that is disposed of in a surface disposal site shall be treated by either the Class A or Class B pathogen requirements unless sewage sludge is placed on an active surface disposal site and is covered with soil or other material at the end of each operating day. When reporting on the DMR, list pathogen reduction level attained as A, B, or C (daily cover). When reporting how compliance was met, list Alternative 1, 2, 3, 4, 5 or 6 for Class A, or Alternative Number 1, 2, 3, or 4 for Class B, on DMR.

(a) Six alternatives are available to demonstrate compliance with Class A sewage sludge. All 6 alternatives require either the density of fecal coliform in the sewage sludge be less than 1000 MPN per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or given away in a bag or other container for application to the land. Below are the additional requirements necessary to meet the definition of a Class A sludge. Alternatives 5 and 6 are not authorized to demonstrate compliance with Class A sewage sludge in Texas permits.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at a specific value for a period of time. See 503.32(a)(3)(ii) for specific information. This alternative is not applicable to composting

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 and shall remain above 12 for 72 hours. The pH shall be defined as the logarithm of the reciprocal of the hydrogen ion concentration measured at 25°C or measured at another temperature and then converted to an equivalent value at 25°C.

The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12.

At the end of the 72 hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50 percent.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 503.32(a)(5)(ii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 503.32(a)(5)(iii) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed or at the time the sludge is prepared for sale or give away in a bag or other container for application to the land.

The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed or at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land.

Alternative 5 - Sewage sludge shall be treated by one of the Processes to Further Reduce Pathogens (PFRP) described in 503 Appendix B. PFRPs include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 - Sewage sludge shall be treated by a process that is equivalent to a Process to Further Reduce Pathogens, if individually approved by the Pathogen Equivalency Committee representing the EPA.

(b) Four alternatives are available to demonstrate compliance with Class B sewage sludge. Alternatives 2, 3, and 4 are not authorized to demonstrate compliance with Class B sewage sludge in Texas permits.

Alternative 1 - (i) Seven representative samples of the sewage sludge that is disposed shall be collected for one monitoring episode at the time the sewage sludge is used or disposed.

(ii) The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge shall be treated in one of the Processes to significantly Reduce Pathogens described in 503 Appendix B.

Alternative 3 - Sewage sludge shall be treated in a process that is equivalent to a PSRP, if individually approved by the Pathogen Equivalency Committee representing the EPA.

Alternative 4 - Sewage sludge placed on an active surface disposal site is covered with soil or other material at the end of each operating day.

4. Vector Attraction Reduction Requirements

All sewage sludge that is disposed of in a surface disposal site shall be treated by one of the following alternatives 1 through 11 for Vector Attraction Reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Volatile solids must be reduced by less than 17 percent to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. Volatile solids must be reduced by less than 15 percent to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours at the time the sewage sludge is disposed.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or an anaerobic treatment process at the time the sewage sludge is disposed.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials at the time the sewage sludge is disposed. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or an anaerobic treatment process.

Alternative 9 -

(i) Sewage sludge shall be injected below the surface of the land.

(ii) No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

(iii) When sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10 -

(i) Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

(ii) When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

Alternative 11 - Sewage sludge placed on an active sewage sludge unit shall be covered with soil or other

material at the end of each operating day.

5. Methane Gas Control Within a Structure On Site

When cover is placed on an active surface disposal site, the methane gas concentration in the air in any structure shall not exceed 25% of the lower explosive limit (LEL) for methane gas during the period that the disposal site is active.

6. Methane Gas Control at Property Line

The concentration of methane gas in air at the property line of the surface disposal site shall not exceed the LEL for methane gas during the period that the disposal site is active.

D. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test - Once/Permit Life, performed within one year from the effective date of the permit

PCBs - Once/Year

Methane Gas in covered structures on site - Continuous

Methane Gas at property line - Continuous

All other pollutants shall be monitored at the frequency shown below:

Amount of sewage sludge* (metric tons per 365 day period)	Frequency
0 ≤ Sludge < 290	Once/Year
290 ≤ Sludge < 1,500	Once/Quarter
1,500 ≤ Sludge < 15,000	Once/Two Months
15,000 ≤ Sludge	Once/Month

* Amount of sewage sludge placed on an active sewage sludge unit (dry weight basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 40 CFR 503.8(b).

SECTION II. REQUIREMENTS SPECIFIC TO SURFACE DISPOSAL SITES WITHOUT A LINER AND LEACHATE COLLECTION SYSTEM.

1. Pollutant limits - Sewage sludge shall not be applied to a surface disposal site if the concentration of the listed pollutants exceed the corresponding values based on the surface disposal site boundary to the property line distance:

TABLE 5

Unit boundary to property line distance (meters)	Pollutant Concentrations* Arsenic (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	PCB's (mg/kg)

0 to less than 25	30	200	210	49
25 to less than 50	34	220	240	49
50 to less than 75	39	260	270	49
75 to less than 100	46	300	320	49
100 to less than 125	53	360	390	49
125 to less than 150	62	450	420	49
≥ 150	73	600	420	49

* Dry weight basis

2. Management practices - Listed in Section I.B. above.

3. Notification requirements -

a. The permittee shall assure that the owner of the surface disposal site provide written notification to the subsequent site owners that sewage sludge was placed on the land.

b. The permittee shall provide the location of all new sludge disposal/use sites where previously undisturbed ground is proposed for disturbance to the State Historical Commission within 90 days of the effective date of this permit. In addition, the permittee shall provide the location of any new disposal/use site to the State Historical Commission prior to use of the site.

The permittee shall within 30 days after notification by the State Historical Commission that a specific sludge disposal/use area will adversely affect a National Historic Site, cease use of such area.

4. Recordkeeping requirements - The permittee shall develop the following information and shall retain the information for five years. The sludge documents will be retained on site at the same location as other NPDES records.

a. The distance of the surface disposal site from the property line and the concentration (mg/Kg) in the sludge of each pollutant listed above in Table 5, as well as the applicable pollutant concentration criteria listed in Table 5.

b. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 503.27(a)(1)(ii) or 503.27(a)(2)(ii) as applicable to the permittees sludge disposal activities.

c. A description of how either the Class A or Class B pathogen reduction requirements are met, or whether sewage sludge placed on a surface disposal site is covered with soil or other material at the end of each operating day.

d. A description of how the vector attraction reduction requirements are met.

e. Results of a groundwater monitoring program developed by a qualified ground-water scientist, or a certification by a qualified groundwater scientist may be used to demonstrate that sewage sludge placed on an active sewage sludge unit does not contaminate an aquifer. A qualified groundwater scientist is an individual with a baccalaureate or post graduate degree in the natural sciences or engineering who has sufficient training and experience in groundwater hydrology and related fields, as may be demonstrated by State registration, professional certification or completion of accredited university programs, to make sound professional judgements regarding groundwater monitoring, pollutant fate and transport, and corrective action.

5. Reporting Requirements - The permittee shall report annually on the DMR the following information:

a. Report No for no liner and leachate collection system at surface disposal site.

b. The frequency of monitoring listed in Element II, Section I.D. which applies to the permittee.

c. Toxicity Characteristic Leaching Procedure (TCLP) results (Pass/Fail).

d. The concentration (mg/Kg) in the sludge of each pollutant listed in Table 5 as well as the applicable pollutant concentration criteria listed in Table 5.

e. The concentration (mg/Kg) of PCB's in the sludge.

f. The distance between the property line and the surface disposal site boundary.

g. Level of pathogen reduction achieved (Class A or Class B), unless Vector attraction reduction alternative no. 11 is utilized.

h. List Alternative used as listed in Section I.C.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met.

i. Vector attraction reduction Alternative used as listed in Section I.C.4.

j. Annual sludge production in dry metric tons/year.

k. Amount of sludge surface disposed in dry metric tons/year.

l. Amount of sludge transported interstate in dry metric tons/year.

m. A narrative description explaining how the management practices in §503.24 are met shall be attached to the DMR.

n. The certification statement listed in 503.27(a)(1)(ii) or 503.27(a)(2)(ii) as applicable to the permittees sludge disposal activities, shall be attached to the DMR.

SECTION III. REQUIREMENTS SPECIFIC TO SURFACE DISPOSAL SITES WITH A LINER AND LEACHATE COLLECTION SYSTEM.

1. Pollutant limits - None.

2. Management Practices - Listed in Section I.B. above.

3. Notification requirements -

a. The permittee shall assure that the owner of the surface disposal site provide written notification to the subsequent owner of the site that sewage sludge was placed on the land.

b. The permittee shall provide the location of all new sludge disposal/use sites where previously undisturbed ground is proposed for disturbance to the State Historical Commission within 90 days of the effective date of this permit. In addition, the permittee shall provide the location of any new disposal/use site to the State Historical Commission prior to use of the site.

The permittee shall within 30 days after notification by the State Historical Commission that a specific sludge disposal/use area will adversely affect a National Historic Site, cease use of such area.

4. Recordkeeping requirements - The permittee shall develop the following information and shall retain the information for five years. The sludge documents will be retained on site at the same location as other NPDES records.

a. The following certification statement found in 503.27(a)(1)(ii):

"I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements (define option used) and the vector attraction reduction requirements (define option used) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine the (pathogen requirements and vector attraction reduction requirements, if appropriate) have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

b. A description of how either the Class A or Class B pathogen reduction requirements are met or

whether sewage sludge placed on a surface disposal site is covered with soil or other material at the end of each operating day.

c. A description of how the vector attraction reduction requirements are met.

d. Results of a ground-water monitoring program developed by a qualified ground-water scientist. A certification by a qualified ground-water scientist may be used to demonstrate that sewage sludge placed on an active sewage sludge unit does not contaminate an aquifer.

5. Reporting Requirements - The permittee shall report annually on the DMR the following information:

a. Report YES for liner and leachate collection system at surface disposal site.

b. The frequency of monitoring listed in Element 2, Section I.D. which applies to the permittee.

c. Toxicity Characteristic Leaching Procedure (TCLP) results (Pass/Fail).

d. The concentration (mg/Kg) in the sludge of PCBs.

e. Level of pathogen reduction achieved (Class A or Class B), unless Vector attraction reduction alternative no. 11 is used.

f. List Alternative used as listed in Section I.C.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met.

g. Vector attraction reduction Alternative used as listed in Section I.B.4.

h. Annual sludge production in dry metric tons/year.

i. Amount of sludge surface disposed in dry metric tons/year.

j. Amount of sludge transported interstate in dry metric tons/year.

k. A narrative description explaining how the management practices in §503.24 are met shall be attached to the DMR.

l. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment (See 503.27(a)(1)(ii) or 503.27(a)(2)(ii) whichever applies to the permittees sludge disposal activities) shall be attached to the DMR.

ELEMENT 3 - MUNICIPAL SOLID WASTE LANDFILL DISPOSAL

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

1. The permittee shall handle and dispose of sewage sludge in accordance with Section 405 of the Clean Water Act and all other applicable Federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 40 CFR 258 concerning the quality of the sludge disposed in the municipal solid waste landfill unit.

2. If requirements for sludge management practices or pollutant criteria become more stringent than the sludge pollutant limits or acceptable management practices in this permit, or control a pollutant not listed in this permit, this permit may be modified or revoked and reissued to conform to the requirements promulgated at

Section 405(d)(2) of the Clean Water Act.

3. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a MSWLF for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

4. The permittee shall give prior notice to EPA (Chief, Permits Branch, Water Management Division, Mail Code 6W-P, EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202) of any planned changes in the sewage sludge disposal practice, in accordance with 40 CFR Part 122.41(l)(1)(iii). These changes may justify the application of permit conditions that are different from or absent in the existing permit. Change in the sludge use or disposal practice may be cause for modification of the permit in accordance with 40 CFR Part 122.62(a)(1).

5. The permittee shall provide the location of all new sludge disposal/use sites where previously undisturbed ground is proposed for disturbance to the State Historical Commission within 90 days of the effective date of this permit. In addition, the permittee shall provide the location of any new disposal/use site to the State Historical Commission prior to use of the site.

   The permittee shall within 30 days after notification by the State Historical Commission that a specific sludge disposal/use area will adversely affect a National Historic Site, cease use of such area.

6. Sewage sludge shall be tested once during the life of the permit within one year from the effective date of the permit in accordance with the method specified at 40 CFR 268, Appendix I (Toxicity Characteristic Leaching Procedure (TCLP)) or other approved methods. Sludge shall be tested after final treatment prior to leaving the POTW site. Sewage sludge determined to be a hazardous waste in accordance with 40 CFR Part 261, shall be handled according to RCRA standards for the disposal of hazardous waste in accordance with 40 CFR Part 262. The disposal of sewage sludge determined to be a hazardous waste, in other than a certified hazardous waste disposal facility shall be prohibited. The Information Management Section, telephone no. (214) 665-6750, and the appropriate state agency shall be notified of test failure within 24 hours. A written report shall be provided to this office within 7 days after failing the TCLP. The report will contain test results, certification that unauthorized disposal has not occurred and a summary of alternative disposal plans that comply with RCRA standards for the disposal of hazardous waste. The report shall be addressed to: Director, Multimedia Planning and Permitting Division, EPA Region 6, Mail Code 6PD, 1445 Ross Avenue, Dallas, Texas 75202. A copy of this report shall be sent to the Chief, Water Enforcement Branch, Compliance Assurance and Enforcement Division, Mail Code 6EN-W, at the same street address.

7. Sewage sludge shall be tested as needed, or at a minimum, once/year in accordance with the method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).

8. Recordkeeping requirements - The permittee shall develop the following information and shall retain the information for five years.

   a. The description, including procedures followed, and results of the Paint Filter Tests performed.

   b. The description, including procedures followed, and results of the TCLP Test.

9. Reporting requirements - The permittee shall report annually on the Discharge Monitoring Report the following information:

   a. Results of the Toxicity Characteristic Leaching Procedure Test conducted on the sludge to be disposed (Pass/Fail).

   b. Annual sludge production in dry metric tons/year.

   c. Amount of sludge disposed in a municipal solid waste landfill in dry metric tons/year.

   d. Amount of sludge transported interstate in dry metric tons/year.

e. A certification that sewage sludge meets the requirements in 40 CFR 258 concerning the quality of the sludge disposed in a municipal solid waste landfill unit shall be attached to the DMR.